

STAR TREK[®]

THE MAGAZINE

The death of Spock

Behind the scenes
with the people who
made it happen

**WALTER
KOENIG**

**STAR TREK II:
THE WRATH OF KHAN[™]**

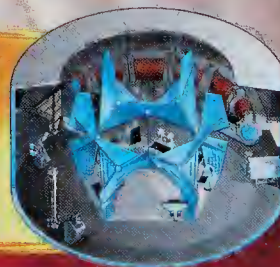
VFX — from the Ceti eel
to the U.S.S. RELIANT[™]

SEPTEMBER 2002
VOLUME 3 ISSUE 05
PUBLISHED MONTHLY
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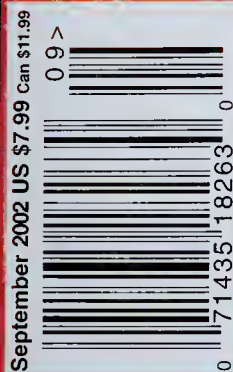
PLUS 4 TECHNICAL BRIEFINGS

• Project Genesis • Khan • The Ba'Neth • A Guide to Sickness



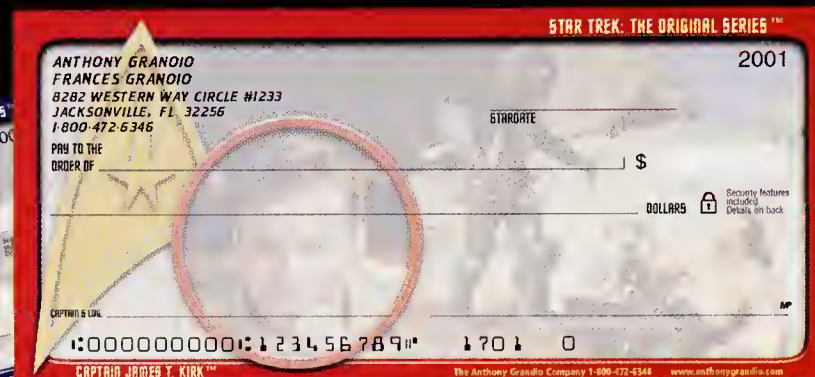
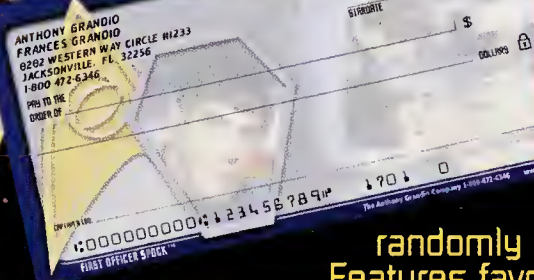
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Project Coordinator: Penny Smartt-Juday

Artwork Director: Rob Garrard

Assistant Editor: Anthony Weaver

Designer: Dean Morris

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Special Collector's Cover!

This issue has two covers: one featuring Spock, and the other showing
the *U.S.S. Reliant* and the *U.S.S. Enterprise* in a fight to the death.



Editors' Letter

STAR TREK II: THE WRATH OF KHAN holds a vital place in *STAR TREK*'s history. The first movie had shown that there was an audience out there, but *STAR TREK II* gave us what we wanted and established that *STAR TREK* was here to stay.

As a movie, it is an artistic triumph. Walter Koenig, who talked to us about Chekov's unusually large role in the film, believes that Spock's death is the single most powerful moment in the history of *STAR TREK*. Enormous credit must be given to the film's producer, Robert Sallin, and executive producer Harve Bennett; and, perhaps even more importantly, this was the movie that brought director Nicholas Meyer into the *STAR TREK* universe. He not only directed *STAR TREK II* but performed an uncredited rewrite on the script, which was universally praised. In an extensive interview he talks about his vision of *STAR TREK* and its characters.

Everyone seems to have enjoyed working on the film – none more so than Kenneth Ralston, who was one of ILM's two visual effects supervisors. He and other members of the VFX team talk to us about how they created everything from the distinctly low-tech Ceti eel to the groundbreaking Genesis demo sequence.

Several *STAR TREK* veterans were back too, including costume designer Robert Fletcher and production designer Joseph Jennings. Special mention should go to art director Michael Minor, who made an incalculable contribution to *STAR TREK* before his untimely death in 1987. In this film he produced storyboards for all the visual effects, co-designed the *U.S.S. Reliant*, and produced concepts for everything from the Mutara Nebula to the Genesis cave. Finally, we took a look at the evolution of the script and how several characters were lost in action before it was finished.

This month's briefings look at some of the extraordinary things we encountered in the movie, including Khan himself and the Genesis Project. We've also turned our attention on the reclusive Ba'neth and some of the bizarre diseases our heroes have encountered in outer space.

ENTERPRISE will return before long, hotly followed by *STAR TREK NEMESIS*, but before then we have an anniversary to celebrate: September is *STAR TREK: THE NEXT GENERATION*'s 15th birthday ...

The Editors

THIS MONTH



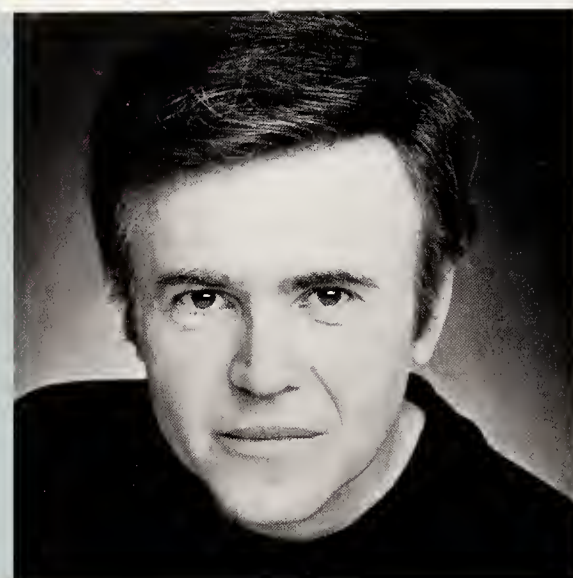
Nicholas Meyer

STAR TREK II's director Nicholas Meyer is also an Oscar-nominated screenwriter. His writing credits include 'The Seven Percent Solution,' 'Fatal Attraction,' and 'Sommersby.' Among other movies, he has directed *STAR TREK VI* and 'Company Business,' and is also the author of several novels.

Walter Koenig

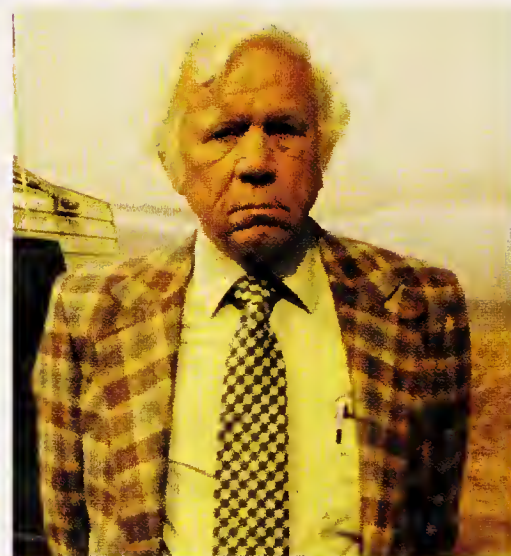
Walter Koenig is, of course, best known to the world as the actor who plays Pavel Chekov. He joined *STAR TREK* in its second season, when he was recruited to add some youthful sex appeal to the series. He also created the role of Bester for the series 'Babylon 5.'

In addition to his achievements as an actor, Walter is a successful writer who has written for the animated *STAR TREK* series, 'Land of the Lost,' and 'The Powers of Matthew Star.' He has written two volumes of autobiography – 'Chekov's Enterprise,' and 'Warped Factors: A Neurotic's Guide to the Universe.'



Alvy Ray Smith

Dr. Alvy Ray Smith is one of the fathers of modern computer animation. George Lucas recruited him to work on movies, where he headed up a team that was responsible for creating the Genesis demo sequence. He subsequently went on to co-found Pixar, which made movies such as 'Toy Story' and 'Monsters, Inc.' He has won two Oscars for his work, and among other things invented the concept of 'sprites' and co-invented alpha channels.



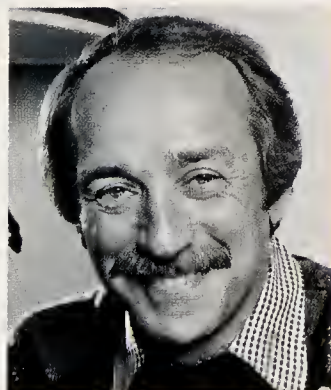
Robert Fletcher

Robert Fletcher is an award-winning costume designer for stage and screen. His influence on *STAR TREK* was enormous; he worked on the first four movies and designed the crimson uniforms that were worn by Captain Kirk and his crew. His other credits include the movies 'The Ballad of Cable Hogue' and 'The Last Starfighter.'



Joseph R. Jennings

Joe Jennings had an enormous influence on the look of *STAR TREK*. In the 1970's he was responsible for redesigning the sets for the abandoned '*STAR TREK* Phase II' television series, establishing a design ethic that was continued into *STAR TREK: THE MOTION PICTURE*, and returned as production designer for the second *STAR TREK* movie. On television, he worked on many series, including 'Gunsmoke,' 'Roots,' and 'Shogun.'



Robert Sallin

Robert Sallin was an admired director of more than 1,600 commercials before he joined *STAR TREK II* as the movie's producer, and has won several prestigious awards, including the Clio. This gave him valuable experience dealing with complex productions and cutting-edge visual effects.

Paul Winfield

Actor Paul Winfield has an impressive resumé that includes roles in the movies 'Sounder,' 'The Terminator,' 'Presumed Innocent,' and 'Mars Attacks!' His numerous television credits include regular appearances on 'L.A. Law' and 'Wiseguy.' He also played the Tamarian captain Dathon in the *STAR TREK: THE NEXT GENERATION* episode 'Darmok.'



Industrial Light & Magic

ILM (Industrial Light & Magic) has been the dominant force in movie visual effects for the last two decades, and has won 14 Oscars for best visual effects. The company was formed by George Lucas after he made 'Star Wars'; *STAR TREK II* was one of the first movies the company took on for a third party, and they went on to work on another five *STAR TREK* movies. The team they assembled for *STAR TREK II* has distinguished itself time and time again; Steve Gawley, head of the model shop, has credits that include 'Men in Black,' 'Jurassic Park,' and four 'Star Wars' movies; modelmaker Bill George went on to design the *U.S.S. Excelsior*, and has been a supervisor on hit movies including 'Harry Potter and the Sorcerer's Stone'; Kenneth Ralston is now a vice president at Sony Imageworks, and his recent credits include the movies 'Contact' and 'Cast Away.'

KIRK vs KHAN



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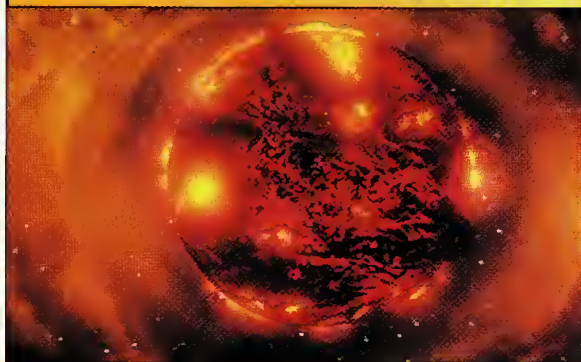
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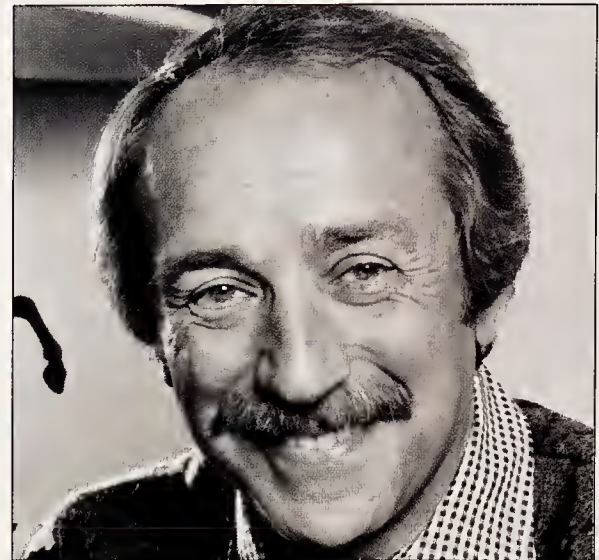
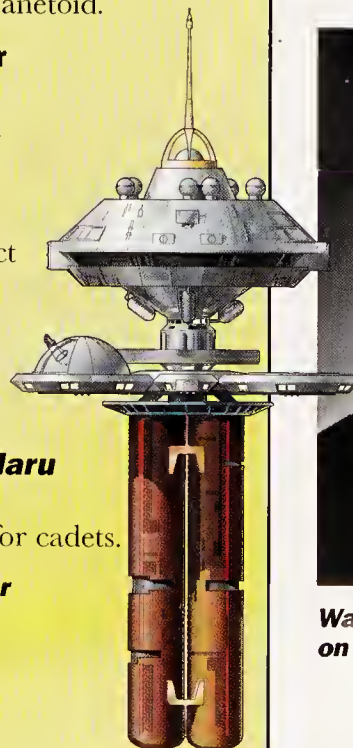
Briefing 1 Project Genesis pages 31-44



A detailed account of all the elements that went into this ambitious project to create life on lifeless planets.

- **Dr. Carol Marcus**
A profile on the leader of Project Genesis.
- **Dr. David Marcus**
The life of Kirk's son.
- **The Genesis Device**
How the actual mechanism behind the terraforming process worked.
- **The Genesis Cave**
The pocket Eden that was created inside the Regula planetoid.
- **Regula I: Interior**
Inside the Genesis development center.
- **Regula I Space Laboratory**
The home of Project Genesis.
- **The Genesis Planet**
A manmade world.
- **The Kobayashi Maru Scenario**
A no-win situation for cadets.

Feast your eyes on our foldout illustration of Regula I.

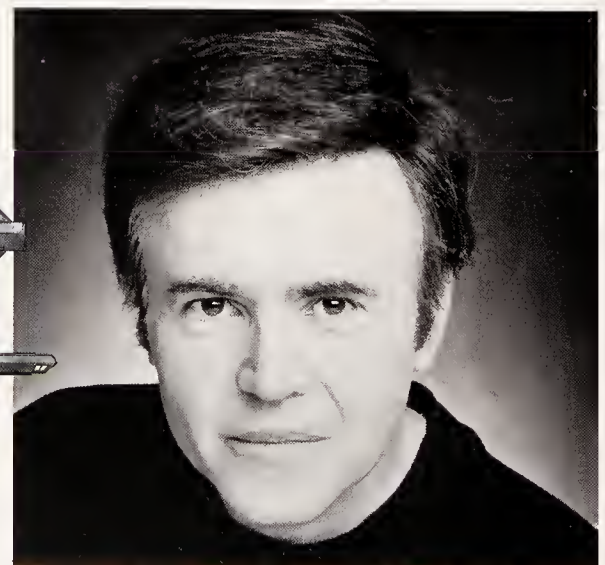


Producer Robert Sallin discusses his contributions to *STAR TREK II: THE WRATH OF KHAN*.

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Walter Koenig talks about his experiences on *STAR TREK II: THE WRATH OF KHAN*.

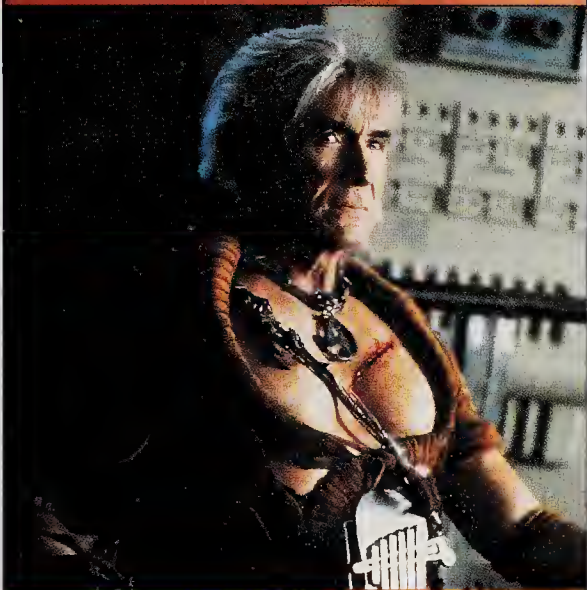


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Briefing 2 Khan Noonien Singh pages 58-65



We turn our focus on Khan, his ship, his wife, and the hostile planet where he was deposited by Captain Kirk.

- **Khan Noonien Singh**
The life of a genetically enhanced megalomaniac.
- **S.S. Botany Bay**
Details of a 20th-century sleeper ship.
- **Marla McGivers**
How a Starfleet officer betrayed her crew and became Khan's wife.
- **Ceti Alpha V and the Ceti Eel**
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Khan used the S.S. BOTANY BAY to escape Earth after the Eugenics Wars.



A powerful being named Sojin replaced Khan in an early version of STAR TREK II.

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82 The Early Scripts

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Briefing 3 The Ba'Neth pages 74-81



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An exposé of this multiplied race.
- **Ba'Neth Station**
The Ba'Neth's base of operations.
- **Ba'Neth Vessel**
Uncovering the Ba'Neth's starships.

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Barclay's Protomorphosis Syndrome is one of the more bizarre diseases we take a look at.

● A Guide To Sickness

An A-Z list of some of the diseases that Starfleet has encountered in the 23rd and 24th centuries.

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92 STAR TREK II Costumes

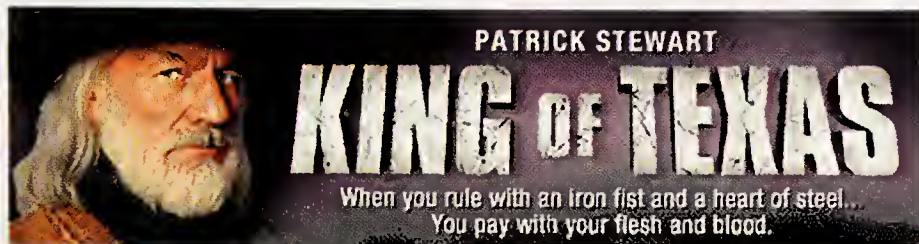
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112 Letters

The pick of this month's mailbag.



Patrick Stewart's rave reviews

As the star of TNT's TV movie 'King of Texas,' Patrick Stewart has won critical plaudits once more. In his role as John Lear in this 1840's Texas version of the famous Shakespeare play 'King Lear,' he plays a tycoon dividing his fortune between his three daughters. 'Variety' described Patrick's work as 'a powerhouse performance that lifts every scene.'

Patrick Stewart played John Lear in a TV movie adaptation of 'King Lear,' set in 1840's Texas; he was also executive producer on the project.



The future is here ...

STAR TREK science comes a little closer with the news that scientists in Australia have teleported a laser beam of light to a new position about a meter away, in a split second. The project's leader, Dr. Ping Koy Lam, was delighted but realistic, telling a news conference that the possibility of transporting people was still way off; humans, apparently, contain 1,000,000,000,000,000,000,000,000 atoms, and the chances of successfully reassembling someone in a distant place are likely to remain remote. He said, "In theory, there is nothing stopping us from doing it, but the complexity of the problem is so huge that no one is thinking seriously about it at the moment." He did hope, though, that it would soon be



possible to beam solid objects from one place to another. "My prediction is that it will probably be done by someone in the next three to five years: that is, the teleportation of a single atom," he continued. The teleporting was achieved using a process called quantum entanglement, which for the time being is likely to be used mainly for superfast communications systems.



Photo courtesy Charlie Wall

Robbie McNeill joins California AIDS event

STAR TREK: VOYAGER star Robert Duncan McNeill joined approximately 1,000 riders and volunteers in the 9th annual California AIDS Ride from San Francisco to Los Angeles, pedaling 575 miles over seven days. Having personally raised close to \$9,000, some of it through his website www.robertduncanmcneill.net, Robbie took off in full riding gear aboard his 'Trek' bicycle, starting off from the San Francisco waterfront with a winding ride of 90 miles to Santa Cruz.

Robbie is directing the second episode of this season's 'Dawson's Creek,' and is expected to helm a couple more this year.

Triumph for Piller's 'Dead Zone'

'The Dead Zone,' based on the Stephen King novel and executive-produced by Michael Piller, premiered on the USA Network in mid June and won a percentage audience share of 4.7, which makes it the highest-rated series premiere in cable television history.

On Michael's team are Michael Taylor, formerly of *STAR TREK: VOYAGER*'s writing staff, and Joe Menosky, of *VOYAGER* and *STAR TREK: THE NEXT GENERATION*. The show stars Nicole deBoer from *STAR TREK: DEEP SPACE NINE* and Anthony Michael Hall, plus David Ogden Stiers, who guested on the *TNG* Season Four show 'Half a Life.'

Kate Mulgrew takes Hepburn to Cleveland

The one-woman play 'Tea at Five,' starring *STAR TREK: VOYAGER*'s Kate Mulgrew as Hollywood legend Katharine Hepburn, will run in the Bolton Theater at The Cleveland Play House for two weeks from August 20. The play premiered at the Hartford Stage, Connecticut, in early 2002, and was a huge success. After its Cleveland run it will move to the American Repertory Theater in Cambridge, Massachusetts.



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by John Bell

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LISTINGS



Out Now

The Official *STAR TREK* Portrait Sculpture – Spock

Franklin Mint has released a hand-painted pewter figure of Spock standing on one of the *U.S.S. Enterprise's* transporter pads. The sculpture is available from their website www.franklinmint.com

The *U.S.S. ENTERPRISE's* first officer, Spock, is the subject of a portrait sculpture from Franklin Mint, priced \$90.



ENTERPRISE [Soundtrack]

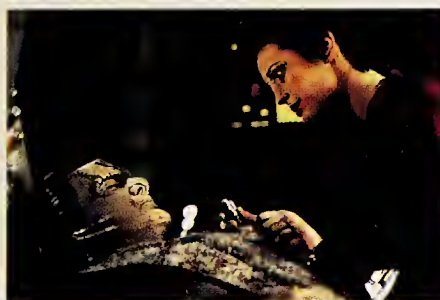
A soundtrack from *ENTERPRISE* has been released on CD. It features music written by composer Dennis McCarthy, who has written numerous scores for previous *STAR TREK* shows, including the main title theme music for *STAR TREK: DEEP SPACE NINE*. The *ENTERPRISE* CD features 15 tracks, including two versions of the show's main theme, 'Where My Heart will Take Me,' sung by Russell Watson.



VHS — August

STAR TREK: DEEP SPACE NINE

Five more episodes from *STAR TREK: DEEP SPACE NINE* are released on August 6.



A dying Legate Ghemor tells Kira his secrets in 'Ties of Blood and Water.'



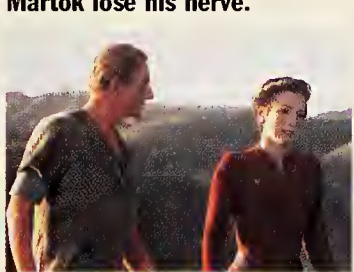
Quark's mother and Grand Nagus Zek fall in love in 'Ferengi Love Songs.'



Quark becomes an arms dealer in 'Business As Usual.'



'Soldiers of the Empire' sees Martok lose his nerve.

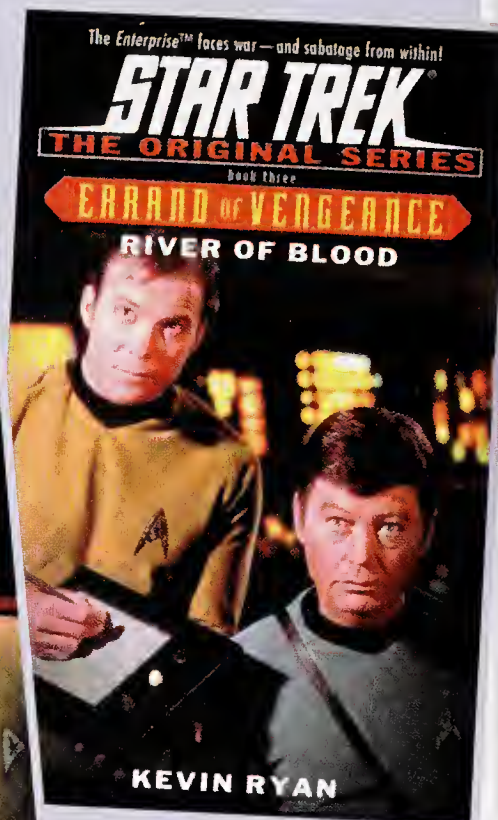
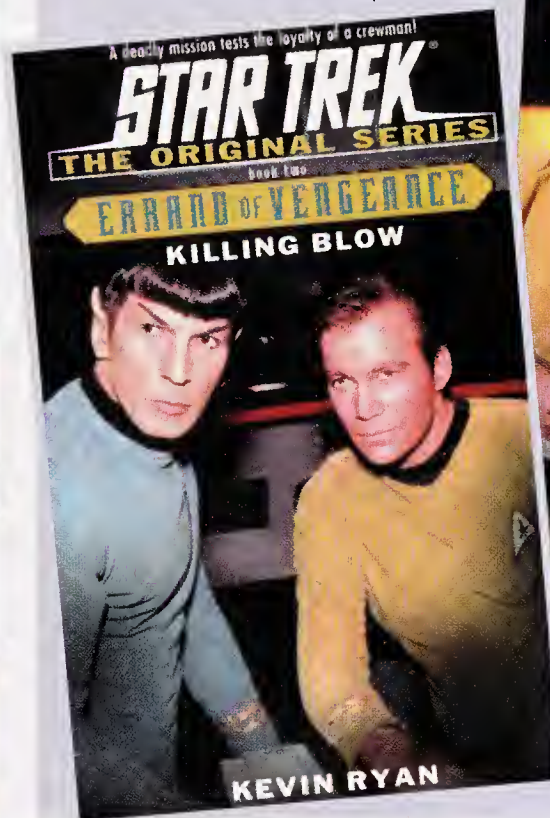


An alternate Odo tells Kira of his love in 'Children of Time.'

Books — August

STAR TREK Killing Blow

Kevin Ryan
Pocket Books, paperback
ISBN: 0-7434-4602-X
\$6.99

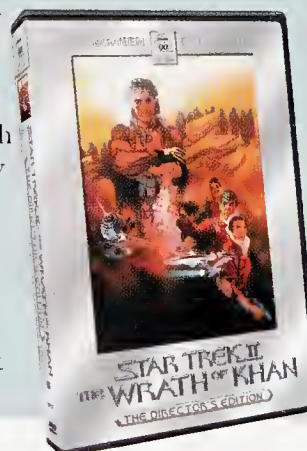


STAR TREK River of Blood

Kevin Ryan
Pocket Books, paperback
ISBN: 0-7434-4600-3
\$6.99

STAR TREK II: THE WRATH OF KHAN

The Director's Edition of *STAR TREK: THE WRATH OF KHAN* is released on August 6 on DVD. It features two disks which have a wealth of material, including an extended director's edition of the film, with commentary by director Nicholas Meyer, and exclusive interviews with the cast and crew.



Conventions

Several licensed *STAR TREK* conventions are scheduled to take place in the next few months.

Creation Entertainment

August 2-4; Las Vegas, NV;
Guests include Leonard Nimoy, Kate Mulgrew, Marina Sirtis

Slanted Fedora Entertainment

August 16-18; Washington, DC;
Guests include Alexander Siddig, Robert Picardo, Ethan Phillips
August 23-25; Philadelphia, PA;
Guests include Avery Brooks

For more information visit www.startrek.com.
All guests are subject to confirmation. This information is correct at the time of going to press.
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STAR TREK II: THE WRATH OF KHAN — The Director's Edition

The Director's Edition of *STAR TREK II: THE WRATH OF KHAN*, on sale in DVD format in August, is a two-disk set: an expanded 116-minute cut of the film by director Nicholas Meyer, and more than four hours of documentary material.

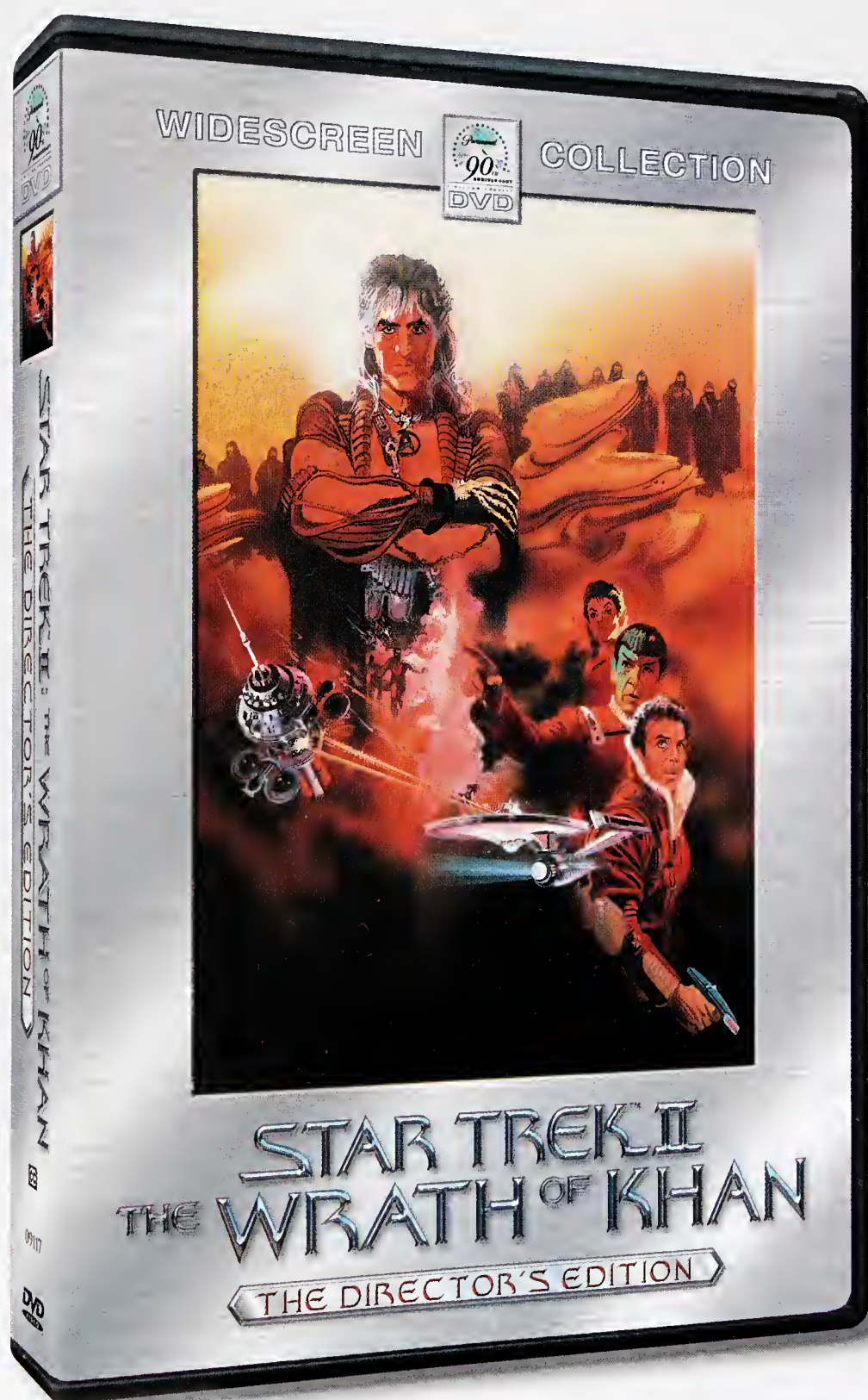
Following the successful release of *STAR TREK: THE MOTION PICTURE* — The Director's Edition on DVD and video last year, Paramount Home Entertainment is revisiting the other *STAR TREK* movies to give them the same treatment. Where appropriate, the original directors will be re-editing the movies to include scenes that were left out of the theatrical versions, and all the disks will include specially commissioned features that examine the making of the films and provide unique insights from their creators.

This month sees the release of *STAR TREK II: THE WRATH OF KHAN* — The Director's Edition, which consists of two disks. The second movie, which is widely regarded as one of the series' best installments, looked back to the original series to find a charismatic villain: Khan Noonien Singh, bent on revenge against Kirk for the suffering of his followers after the *U.S.S. Enterprise NCC-1701* had rescued them from a sleeper ship and relocated them to Ceti Alpha V.

Final cut

Disk 1 contains the movie, plus a feature-length commentary by Nicholas Meyer and a text commentary by Michael Okuda. Nick has re-edited the film to include some extra scenes that were cut from the theatrical release but included in the movie's first television broadcast on ABC. Most significantly, he has restored a subplot involving Mr. Scott's nephew, Peter Preston, a crew member aboard the *U.S.S. Enterprise NCC-1701* who was killed during Khan's initial attack — this makes a little more sense of the scene where Scotty appears on the bridge, holding the body of a dead crewman. These additional scenes have never before been available on video or DVD.

Disk 2 contains the theatrical trailer, story-





For *STAR TREK II: THE WRATH OF KHAN* – The Director's Edition, Nicholas Meyer has restored some scenes that were cut from the original version because of time constraints. The most significant scenes involve the character Peter Preston; the new version of the movie makes it clear that he was actually Scotty's nephew, thus explaining why the chief engineer is so disturbed by the young man's death.

board archives, and a wealth of other behind-the-scenes extras. Producer Mark Rance of Three Legged Cat, the company that created most of the documentary material, explains: "The Captain's Log' is a collection of on-camera interviews that tracks the production history, with Nick Meyer, Harve Bennett [executive producer], Ricardo Montalban, Leonard Nimoy, and Bill Shatner. Shatner is very good on what makes *STAR TREK* work, and he loved working with Nick Meyer. That runs for about a half-hour.

"We also produced a half-hour documentary called 'Designing Khan'; that's Harve Bennett, Lee Cole [graphic designer], Robert Fletcher [costume designer], Joe Jennings [production designer], Nick Meyer, and Ricardo Montalban. Then we took the original EPK [Electronic Press Kit] that was shot at that time, and we re-edited it slightly. It features interviews with Nimoy, Shatner, DeForest Kelley, and Ricardo Montalban. We've called it 'The Original EPK Revised,' and it's about 10 or 15 minutes long."

Also on the disk is a documentary called 'The Visual Effects of *STAR TREK II: THE WRATH OF KHAN*,' created by John Barbour and Gary Khammar of Light Source & Imagery, which highlights the work of the ILM visual effects designers, from the ship battles to the Ceti eels. It includes most of the original footage shot at ILM, including test footage.

Another major half-hour documentary is called 'The *STAR TREK* Universe: A Novel Approach.' Mark Rance says, "We interviewed two *STAR TREK* novelists, Greg Cox and Julia Ecklar. It looks at the wealth of backstory that was created with this film, and what these writers have done with it;

Julia Ecklar wrote a book called 'The *Kobayashi Maru*,' and Greg Cox wrote a series of novels forming the complete backstory of Khan, so you get the Eugenics Wars and his leaving Earth, and then his life on Ceti Alpha V ['The Eugenics Wars: The Rise and Fall of Khan Noonien Singh']."



The specially commissioned features include a director's commentary and several documentaries that look at the making of the movie. The second disk also includes interviews filmed at the time with the actors.

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Nicholas Meyer

***STAR TREK II: THE WRATH OF KHAN* was Nicholas Meyer's second movie as a director. As he remembers, he saw *STAR TREK* as a space opera and wanted it to be filled with drama and real feeling.**

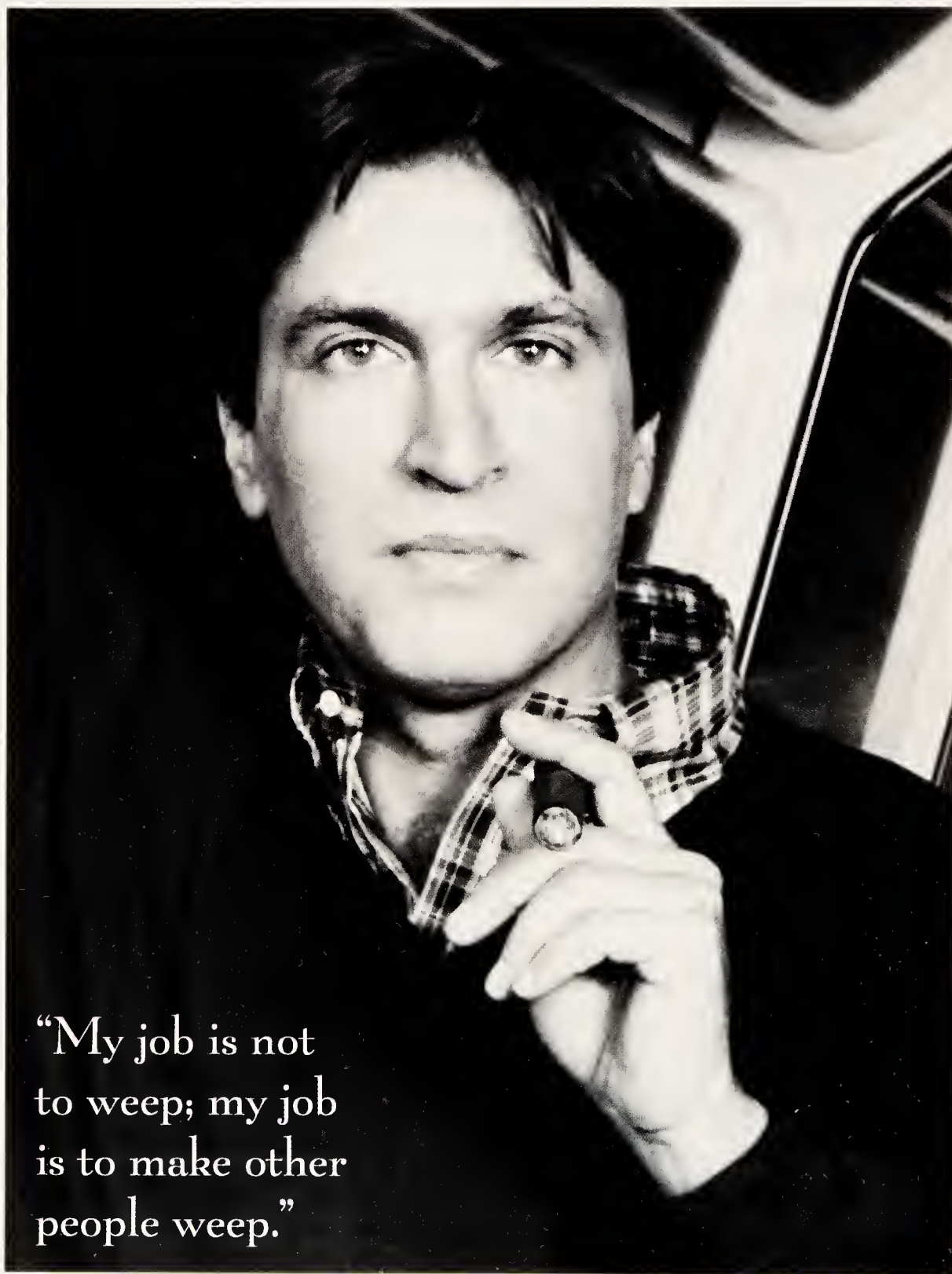
There is one special occasion in *STAR TREK II* that sticks out in director Nicholas Meyer's mind; it's a moment when he realized that the movie was working and that *STAR TREK* was more important to people than he had imagined. "We were shooting Spock's death scene, which I had written as operatically as I could; I was busy doing it, and I turned and looked at my cinematographer, and he was crying! I looked at various other people on the set who were standing around watching this, and they were all weeping. And I thought, 'What is going on?' It was only then that I had an intimation for the first time of what this was about, and what I had succeeded at."

Emotional control

In many ways, that moment sums up what makes it difficult to be a director. It was Nick's job to make sure that each scene had the greatest possible impact on the audience. He had to make decisions about everything you saw on screen; how the shot was structured; how the lights were arranged; how the actors moved; even what the set and the costumes looked like. And every choice had to be made with an eye on how the audience would respond.

"The novelist Henry James said that life is hot, but art is cool. If you are the puppeteer, you cannot be out front, sobbing at the performance. You are backstage, insuring that the strings do not get tangled. I spent my time performing that function, and saying, 'My job is not to weep; my job is to make other people weep.'

"When I'm in the theater and the house lights go down, my jaw drops, metaphorically. I am ready for the experience that makes me laugh or makes me cry. When something happens that causes my jaw to snap shut, I know there's something wrong. When you're directing your job is to keep those feelings just under the surface, so that



"My job is not to weep; my job is to make other people weep."



An enormous amount of the action in *STAR TREK II* takes place on the bridge of the U.S.S. ENTERPRISE NCC-1701, which was not a set that Nicholas Meyer was fond of. He wanted it to feel warmer and more interesting than in the first movie, so he had the art department add more controls to each of the stations and turn on as many of the lights as possible.

you're going to object to something before the real audience does."

Of course, although the director makes the final decisions, he has many, many collaborators. On *STAR TREK II*, most of the department heads were in place before Nick was, but, although he didn't get the chance to choose them, he says they were all terrific. As he remembers it, he would tell them what he wanted to achieve and leave them to work out how to deliver it. "My conversations with people were mainly conceptual; they were not flavored with specific examples, although I'm sure that I used as a reference movies like the first 'Alien.' For instance, I would say to Gayne [Rescher, director of photography] 'Look, I'm not going to choose the lenses; that's not my area of expertise. What I'm going to do is tell you what I want, and I'm going to expect you to take that idea, run with it, and make it better.'"

Established universe

The department heads weren't the only things that were in place when Nick arrived: because this was a franchise movie, he was working with established characters, in an established universe. As a consequence, some things simply couldn't be changed, and, although Nick believes that art thrives on restrictions, he adds there were times when he was frustrated.

"I hated the whole design of the bridge because there were so many things that didn't make any sense. I mean, to take a silly example, if they are in terrible circumstances and everything gets all shook up, why don't they have seatbelts? And the answer is, because if they had seatbelts it wouldn't be very interesting. Most of the movie actually takes place on that damn bridge, which is a very tedious set to photograph, and it was also, in a reconfigured form, the bridge of

the *Reliant*, so I spent a lot of time there.

"The biggest problem was just keeping alive what is happening in a 360-degree world. The bridge was, very rightly, built in pie sections, so you could yank out sections and put the camera in. But, occasionally, you might want to be in the middle and sweep the camera around at what is going on. The sections are curved at the top, so when they are all in, how do you get light in there? It's a sort of a nightmare scenario. Gayne invented a lot of very peculiar apparatus that dropped in from the top with light coming off, like a big chandelier on a chain."

Adding detail

Nick didn't have the budget to make any significant changes to the set, but he did ask production designer Joseph Jennings to find ways of making it look more detailed and specific. "The least I thought we could do was revamp the bridge and make it twinkle. I remember I had Joe Jennings build me a wall of blinking lights. It was on wheels, and we would shove this thing around behind people, to try anything to break up this expanse of gray panel."

The design of the bridge also affected the way Nick chose to frame his shots. He says that because the actors were always at the same stations, he tended to shoot more closeups than he would have done otherwise. "I get very involved conceptually in whether the camera is going to move or not; I tend to love things where the actor walks and the camera walks with him, but otherwise it all happens within the frame. A spaceship is not a bad place to do that. On the other hand, if something is coming straight at you — say, the cast is reacting to an incoming torpedo — you may want to try to simulate that by moving the camera toward whoever is in the shot. And the rules change when you're in the

corridors, where you may want to be mobile."

He was also able to have a major impact on the look of the film by adopting a different approach to the lighting. "I was much less interested in the sort of flat look of the first movie and much more interested in a low light level: specific light sources, coming off the instrument panels, not just sort of futuristic fluorescent illumination. I talked to Gayne in broad conceptual terms, which is to say, I said, 'I'm an opera fan, and this is a space opera. I want it to be highly theatrical, but I don't want it to be as theatrical as 'Blade Runner,' where I couldn't understand why Harrison Ford couldn't get decent lighting in his own apartment!'"

Another of the restrictions Nick faced was that the majority of the cast were already in place. "I had to work with that," he nods, "and figure out what their strengths and weaknesses were as performers. My recollection is that I would learn from them both what they *could* do and what they *would* do. They never tried to pull rank on me, which I felt was really lovely. They put themselves in my hands."

Getting familiar

Before filming began, Nick invited the cast to his house so that they would have a chance to rehearse. "We all sat around my dining room table and read the script. Somebody would say 'I can do this with a look,' and I'd say, 'Fine.' We sort of got to know each other and what we were doing."

That rehearsal session was just part of a process in which the actors helped refine the script, which, of course, Nick had written. Rather than feeling protective about his words, he says everyone had a valuable contribution to make. "You



One of the things that surprised Nick was how much funnier the actors made the words he had written. He singles out the scenes involving Spock, which he says relied on a kind of deadpan humor that you couldn't see on the page.

learned along the way if you were allowed to change language to make something punchier, and they were very good at telling me things that would help me do that. Nichelle Nichols would say, 'Well, this isn't how Lieutenant Uhura would say this. She would say this.' 'Ah, OK, better.' I was trying to resolve that kind of information with my own specific inclinations – I was determined that they would all be speaking English as opposed to sort of techno-speak, which is where I sort of go south."

Something extra

Nick was also pleased to see that the actors often made his words more interesting on the sound stage than they had been on the page. "It always got better when there were people actually doing it. It became more involving; it became more real; it became more charming; it became a lot of things."

In particular, he says the script became much funnier than he thought it would be. "The Spock stuff was very flat on paper, but when Leonard was doing it, it became much more funny. And the whole scene between Saavik and Kirk in the elevator, where it was who was going to out-deadpan who, was really a very different scene when you saw it than when you read it."

He goes on to say that what the cast contributed wasn't necessarily an intellectual interpretation of the script, but something that was unique to themselves. "A lot of what movie acting is about is not acting; it's about behavior, and that's something that the camera just captures."

However much an actor brings to a script,

the director has to make sure that everything they contribute is appropriate to the movie as a whole. As Nick explains, a large part of the job is working out how to get an actor to produce their best work, and there are as many different solutions as there are actors. "With Bill Shatner, I found that the best thing was to do many takes: take after take after take after take. He had a tendency, and I don't know where he got it, to sort of strike attitudes, to be Captain Kirk, the hero, whatever, but if you did it enough times he would stop doing that, and then he would just *be* it instead of performing it. For somebody like Ricardo [Montalban], first or second out of the box is probably going to be the best. Thank God we didn't have a shot where they were both in the same frame!"

Ricardo Montalban wasn't able to make the session at Nick's house, because he was busy filming his television series 'Fantasy Island.'

When he reported for work, the first scene Nick filmed was his opening monologue when he tells Chekov and Terrell what has happened to him.

Too dramatic

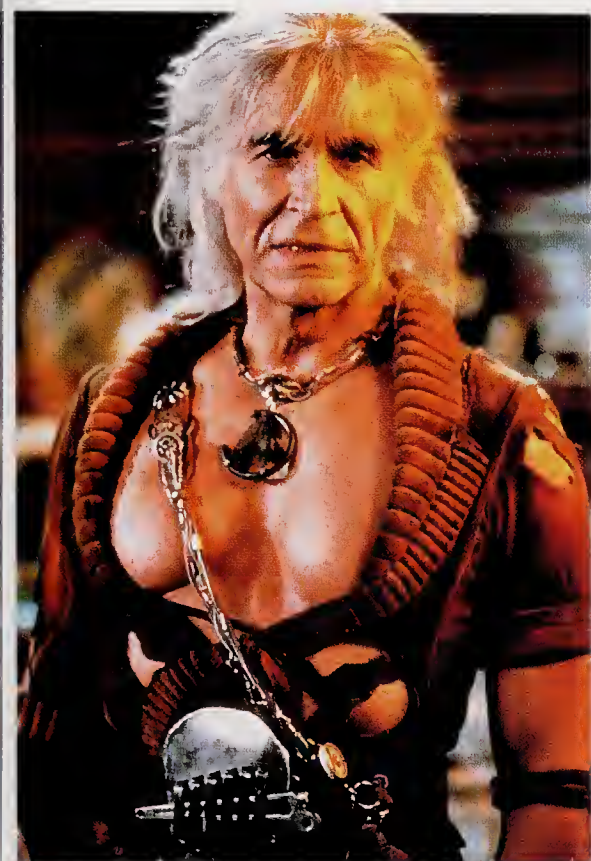
"I had this idea to do this speech, which was several pages long, in one shot. The reason I thought about doing it this way was, a lot of times you're just working up a head of steam when somebody yells, 'Cut!' So I show him what I've got in mind, and he proceeds to be letter perfect for, I don't know, five pages, and he hits every mark of 26 marks, which is extraordinary to me.

"The only fly in the ointment is that his performance was somewhere beyond Mars. I mean, the rafters were shaking. People from miles away were saying, 'What was that?!' And I thought, 'Oh, my goodness; what now?' I said to him, 'Well, OK, we've got all this done; let's let these people light and we'll go off to your trailer and have a little chat.' As we were walking back I kept thinking of all the movies this man had made compared to the one that I'd made. I had no idea how he was going to react. I said, 'So, Ricardo, I want to quote something that Olivier once said. 'An actor should never show an audience his top. Because once he does, they know he has no place else to go.' He said, 'Ah.' Then I said, 'The other thing is that crazy people, people who are out of their minds, are much scarier if some of that stuff is being tamped down and you really don't know what's going on with them.' And he said, 'Oh, oh, oh, I see; yes. You're going to direct me. This is good. I *need* direction.'"

"Then he proceeded to regale me with stories of directors that he had worked with in his contract years at MGM, and how disappointed he was just to deal with shooters.



Nick found that William Shatner often gave his best performance after several takes.



Nick has enormous respect for Ricardo Montalban, who, he says, is an underrated actor who should have played 'King Lear' on Broadway.

So from that day we formed a collaboration, and he wouldn't lift an eyebrow without saying, 'Nick, what if ...' It was a very rewarding experience."

Because Ricardo had appeared in an episode of the original series ('Space Seed'), Nick wasn't involved with casting him, though he certainly has no complaints – "Khan is enough to tell you that this is a great actor," he says. "And, like most great actors, he is under-utilized." Most of Kirk's crew were also in place, but Nick was intimately involved with casting several new roles. He says that what he was looking for was actors where he could see what the characters were feeling, even when they weren't talking.

Beautiful and intelligent

"For Carol Marcus I wanted a woman who was beautiful and looked like she could think; a woman who was attractive enough that you could see why Kirk would fall for her, and at the same time somebody who could keep up with him. She could say, 'Well, all right, sailor, if you're going to go off and do this, don't expect me to sit home and languish, 'cos I ain't going to. I've got work.' I loved Bibi Besch; I became very close with her, and I used her again in 'The Day After.' She's no longer alive and I bitterly regret it; she was a lovely human being, and a lovely actor.

"Merritt Butrick is also tragically no longer

alive. [As David Marcus] he not only had to be Kirk's son, he had to be Carol's son, so on a physical level I think what I liked was that his hair was the same color as hers but it was curly like Bill's, so I thought, 'Well, that's plausible.'

"I think that he had a lot of promise that he didn't fully realize. He was never completely happy with his work as Kirk's son. He would come off doing things and feel that he'd been rather mealy-mouthed, and then we'd go back and do it again. His best scene is, I think, his most important in the movie, which is his scene with his father at the end.

"Captain Terrell [Paul Winfield] was an actor I had wanted to work with since I saw 'Sounder,' and I thought, 'Wow, what a lovely actor.' There was no real reason for him to be the captain of the *Reliant*, other than my great desire to direct him in scenes! I knew he could do it, without any question."

Natural Vulcan

The biggest casting coup was giving a young Kirstie Alley the role of Saavik. "She said as a child she wanted to be Spock and that she was so in love with the role that she wore her ears to sleep," Nick recalls. "A lot of people become actors because they didn't quite fit in. You know, all the rest of the kids were playing football or being cheerleaders; they were slightly off in a dream world. I think there was something about Spock with which she felt a great affinity. There she was,

out there in Wichita, Kansas, and what was she able to relate to? She was able to relate to this other-worldly guy. It was a felt thing. She didn't have to find the role; she didn't have to work her way into it. She'd been living it somewhere in her head for years. There just wasn't a contest. I don't recall seeing another actor for that part who was as persuasive."

Deadpan brilliance

Nick adds that, in addition to her instinctive understanding of the role, Kirstie brought some other, slightly more definable qualities to the role. "The thing about her is that she's beautiful, but she also had a slightly other-worldly quality. And I think I was a sucker for a woman with dark hair and light-colored eyes. I found that very attractive and interesting; it's probably also relatively unusual. And she had a hypnotic stare; somebody else might have been considered merely myopic, but I don't think there's anything wrong with her vision!

"She was also able to encompass that sort of flat unemotionality, but she's basically a comedian. What I didn't know was that that flatness, like Leonard's, frequently comes out of a kind of a deadpan. I realized that when I watched her doing it. Then, at the other end of it, there she was at Spock's funeral, weeping. I remember somebody came running up to me and said, 'Are you going to let her do that?' And I



Kirstie Alley made an enormous impression as Saavik. Nick says that she was an absolute natural for the role, and was everything he could have hoped for.



Nick describes the process of directing as being like “writing with a bigger pencil,” and believes that the shots you film are like sentences in a book that hasn’t been written until you get into the editing suite and put everything together.

said, ‘Yeah,’ and they said, ‘But Vulcans don’t cry,’ and I said, ‘Well, that’s what makes this such an interesting Vulcan.’”

Movie making has been described as having three acts: writing, directing, and editing. Ideally, each stage involves contemplation of the last. On this movie, however, Nick says he had little time to rethink any of his decisions. “This film was very short-order cooking. It was booked into theaters before we ever started shooting it, so the schedule was punishing. I have never, before or since, experienced anything like it. I was shooting in the day and editing at night; there was a week or two when I didn’t actually see daylight. I’d come to work in the morning before the sun went up, be all day on sound stages, and then I’d watch dailies in a projection room while eating lunch, finish after the sun went down, and then go into editing rooms at night.”

Room for inspiration

When it comes to the editing, Nick says that he believes in following the script closely, but adds that this doesn’t mean that he knows exactly how he is going to cut a scene together before he films it. “When I shoot a scene I may have some ideas where it’s going to begin and where it’s going to end, but if you know exactly how it’s going to come together, in a way you’re saying, ‘I know what the actors are going to do.’ An actor may take a line and do something in his delivery that manages to completely surprise you. It may be as simple as the flicker of an eye. They find more meaning in what you wrote than you did. And then that affects what you decide to put into the finished cut.”

When Nick had finished his original cut, he sat down with executive producer Harve

Bennett and they agreed on a few more changes before they passed it on to the studio for their approval.

At this point, several short scenes were cut out. They have now been restored in ‘The Director’s Edition,’ but Nick says this doesn’t necessarily mean the movie has been improved. “Sometimes when a film has got to be released there may be a couple of things the director and the studio don’t agree on. And here I’ve put back one or two things; there were not a lot of big things, and the viewer will decide for themselves whether it improves on, or doesn’t, what was the studio version.”

One thing Nick did not include in his first

cut that has been included in all subsequent versions is the shot that shows Spock’s coffin lying on the Genesis Planet. He remembers that, at the time, he thought this weakened the movie, but since then he’s changed his mind. “There was no sense that this thing was going to be so successful, until they saw the movie in rough cut. Then, suddenly, it was like, ‘Oh, wait a minute. Spock dying? Maybe this is not such a good idea!’ That was when they decided to include the shot of the coffin on the Genesis Planet. I understood why they were doing it, but I hated it. I thought, ‘God, there are so many people who care so deeply about this man, if he isn’t really dead, then that’s sort of unforgivable.’ In retrospect, I think I was wrong. I would have to say that I think it all works; it looks like it’s intended, and it’s very beautiful, and the music that James Horner wrote for it works. It leaves you with some hope.”

What it’s all about

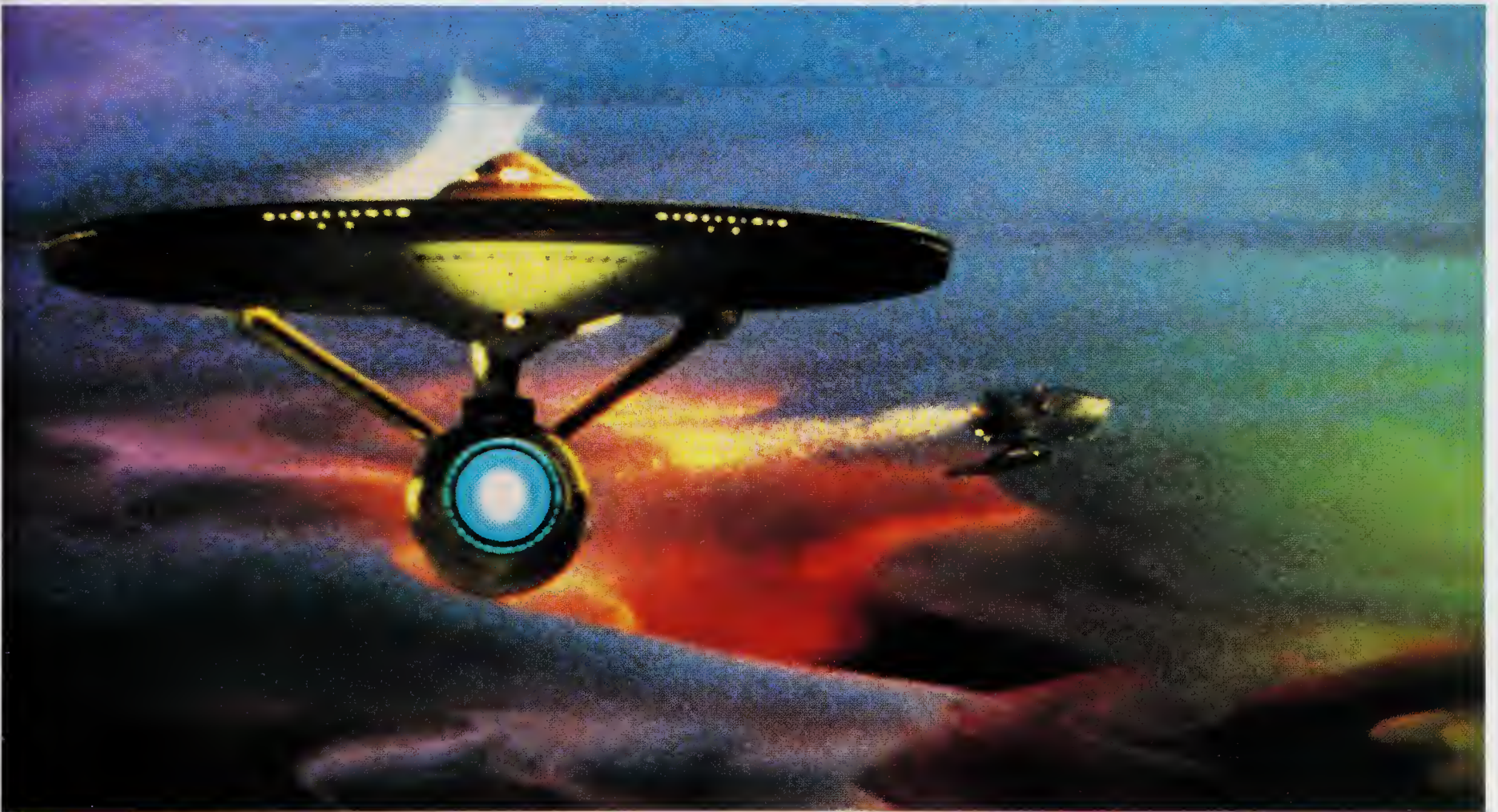
When Nick’s work was finished, he sat down with an audience to see if everything he’d worked so hard for had come off, and he wasn’t disappointed. “Watching a movie you’ve made that succeeds with an audience is a tremendous high. When you’re sitting there watching *STAR TREK II* with an audience, you know why you’re in the business. You put up with everything so that you can watch your movie and hear people laugh and cry at things that you have constructed, and it’s a real good feeling.” ☆



Originally, Nick felt that the funeral should be the last time we saw Spock’s coffin, but he now feels the shot of it on the Genesis Planet leaves the audience with a feeling of hope.

ILM: Visual Effects

The visual effects for *STAR TREK II: THE WRATH OF KHAN* were created by ILM, who made sure that producer Robert Sallin got exactly what he wanted. Their work included modifying and building starships, digitally generating starfields, and using a mixture of ammonia, water, and cartoon paint to make a nebula.



The visual effects for *STAR TREK II: THE WRATH OF KHAN* were filmed quickly and efficiently, with minimal problems – and, very importantly, they came in on budget. The contrast with *STAR TREK: THE MOTION PICTURE* couldn't have been greater; on that film, the effects were produced under almost impossible conditions, and they ended up costing two or three times as much as an entire movie. There are several reasons for the difference. First, in Robert Sallin *STAR TREK II* had a producer with experience of working with visual effects. In 1981 this was something very few movie producers had, but Bob had directed more

than 1,000 commercials where effects were commonplace. Second, the effects were produced by ILM, who would come to dominate the industry in the coming decades. *STAR TREK II* was something of a watershed for them, since it was one of the first movies they worked on in which their founder, George Lucas, had no involvement; its success helped establish them as the premier source of effects for the entire moviemaking industry.

Looking back, Bob Sallin says that he couldn't have been happier with ILM's approach to the project. "They were incredible. The most professional, the most delightful, the most responsive; I couldn't

say enough good things about the whole crew. It was an amazing experience."

In order to get the work done in time, and to insure that all the expertise they needed was in place, ILM assigned two supervisors to the movie – Kenneth Ralston and Jim Veilleux. This was Ken's first job as a supervisor, and he remembers that the two men divided the work up between themselves. Jim had a particular interest in computer graphics, so he worked with Alvy Ray Smith and George Lucas's computer graphics team on the Genesis demo tape (see page 50). He also handled the starfields, the matte paintings, the split screen work, and the final explosion that

Behind the Scenes



ILM reused the original model of the U.S.S. ENTERPRISE NCC-1701 that Magicam had built for the first movie. The model was beautiful, but extremely heavy.

created the Genesis Planet. This left Ken to handle the rest of the movie. "I took the cool stuff!" he says. "I wound up doing a lot of the action stuff; all the confrontations between the *Reliant* and the *Enterprise*, and the nebula chase at the end."

Difficult model

As a sequel, *STAR TREK II* was able to make use of the models that had already been constructed for the first movie. This obviously had budgetary advantages for the producers, but it did cause a few problems for ILM. Steve Gawley, who was head of the model shop, remembers that the *Enterprise*, which had been built by Magicam, was an enormous, and extremely heavy, model that was very difficult to maneuver. "I believe it was a four- or five-foot diameter dish, and I think the overall length was maybe 10 feet plus. Our biggest fear was dropping it. It took maybe eight or nine people to move it, and you could only hold on to the center area; you couldn't hold on to the engines, and you could only lightly hold the saucer."

Marty Brenneis, who was responsible for all the electronics, adds that weight wasn't the only problem. "The lighting in it was obviously done by a modelmaker who knew nothing about electricity. I and a couple of the modelmakers had to do some rewiring to at least make things safe! It was too much work to completely rewire it, but we patched the bits that really were hazardous so that we could use it." Another complication was that

all the lights were sealed inside the ship, so if even one was damaged the entire model would have to be taken apart.

The *Enterprise* wasn't the only model that Bob Sallin wanted to reuse; he also thought the orbital office complex that Kirk beamed up to in *STAR TREK: THE MOTION*

PICTURE could be modified to become Regula I. "We were given the task of making it look different," Steve recalls. "We took it apart and put it upside down and then reattached some of the outer pods in a different way."

Intelligent lighting

One of the modifications ILM made was adding an animated sequence of lights to the hangar bay. As Marty explains, the lights on this model were actually activated by the camera, which at the time was a significant innovation. "They wanted these animated lights that run in a sequence across the top of the bay; that kind of stuff has to be done a particular way if you are going to shoot it with motion control. My original job was building motion control systems, and I know something about lighting, so I sort of put the two together and said, 'Would you guys like some help with this?' I made modifications to the system so that it could 'talk' to the model. That was the first time I ever did that, but after that it became a standard thing."

The remaining model shots required entirely new models. The team built the Regula planetoid and several other simple pieces, but the biggest task was building the *Reliant*, which was the first new Federation ship we had seen since the original series.



Bob Diepenbrock (left) and Brian Chin work on the model of Regula I. This was originally the orbital office complex, but was heavily modified for the new movie.

Steve says that this time they were keen to avoid the problems they had encountered with the *Enterprise*. "We realized that we didn't have to build it as large because we could obtain a pretty good level of detail on a smaller model, and we lit it with internal lighting that was built up here for us, to our specifications."

Paramount's art department provided ILM with detailed drawings to work from, and, as modelmaker Bill George remembers, a general instruction that the *Enterprise* and *Reliant* should look as different from one another as possible. "The one thing that was a little bit different on the drawings was that they had come up with a totally new color scheme for the graphics, thinking that would make it look different. They were done in like a yellow and green checkerboard. When I got them in I said, 'This can't happen.' So I showed them to Ken Ralston. His take on it was, 'Let's put on the Federation graphics we've seen before, and see what they say.' Thankfully, the producers were happy with that."

Moving through the stars

One of Jim's major innovations involved the way that stars behind the ships were created. Historically, this had been done by filming what was effectively a black piece of card with holes in it that lights were shone through. While Jim was looking for ways of generating material he could put on the *Enterprise*'s viewscreen, he came across an alternative approach to starfields.

A computer company called Evans & Sutherland had designed a system called Digistar 1, which they used in planetariums. As Jim's effects director of photography Scott Farrar explains, it could show a dynamic camera move through an enormous database of stars. "Jim wanted to try some things that were different. We flew to Salt Lake City, Utah, where they were based. The main thing they were producing that was marketable was, in essence, a graphic recording of all the stars known to mankind as recorded from Earth. All the known stars and their positions were input into this system. It was great because, once you had all the stars, you could project things. Because you can only see to a certain point, in essence, you came up with a sphere. You could take a camera and fly from one side of the sphere to the other. That's how we constructed our camera moves, and we had three-dimensional views of stars that we could put in behind the ships. That certainly gave us a unique look."

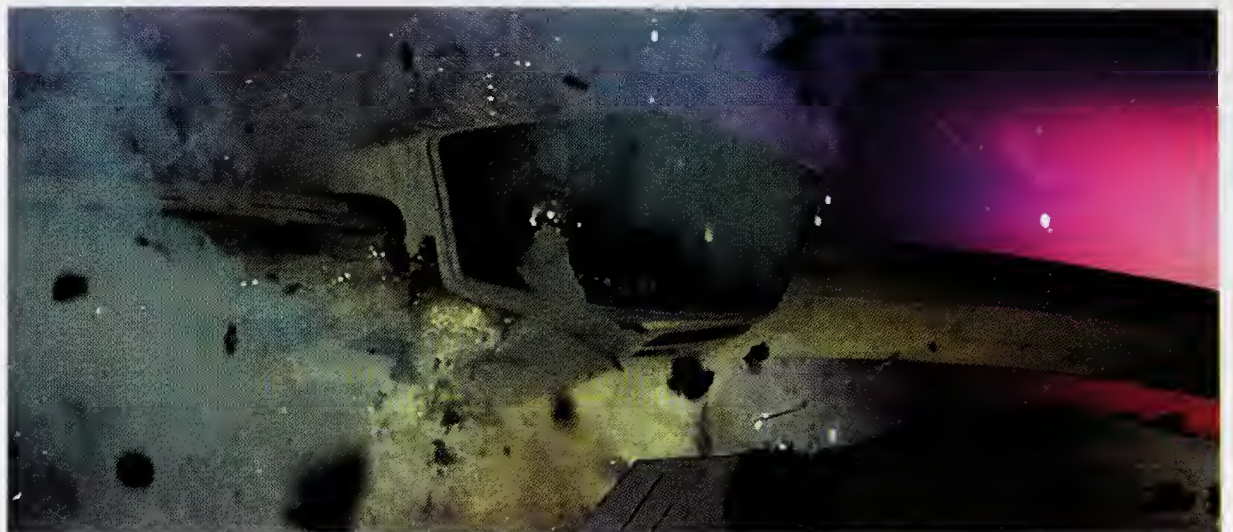
The Evans & Sutherland programmers



The model of the U.S.S. *RELIANT* NCC-1864 was built at ILM following designs that were provided by the Paramount art department. It was much lighter than the *ENTERPRISE*.



ILM also built several sections of the *RELIANT* that could be blown up in the battle sequences. For this scene, they also composited in a shot of exploding glass.



The *RELIANT*'s 'roll bar' was the largest of the 'breakaway' sections that ILM built, and was actually bigger than the full-size model of the *RELIANT*.

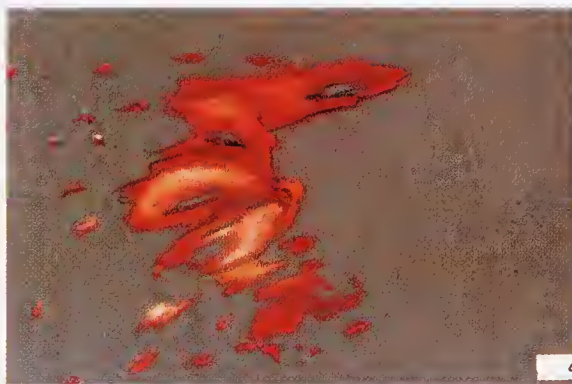
Behind the Scenes



The moving stars that were used for the opening titles and throughout the movie were created using a piece of software that was designed for use in planetariums.



This shot in which Terrell shoots Jedda was filmed using a portable bluescreen. The phaser blast and disintegration effect were animated by Kim Knowlton at ILM.



Like all the visual effects sequences, Jedda's death was carefully storyboarded. The team worked with producer Robert Sallin, who approved everything ILM did.

adapted their system to work like a motion control camera, with impressive results. By using a joystick the team could create any move they wanted, and because the system was computerized the moves could be repeated perfectly. The resulting film of the stars could then be combined with the footage of the models that was shot at ILM. The technique was so successful that Bob Sallin decided to adopt it for the opening titles, abandoning the sequence he had originally storyboarded.

Reflective finish

Ken Ralston's team were able to use this technique to produce the backgrounds for the first battle between the *Enterprise* and the *Reliant*. Ken remembers that when it came to shooting the *Enterprise* they encountered several serious problems. "It was a beautiful model, but unfortunately some of the gorgeous stuff that [Douglas] Trumbull had come up with caused us problems. It had a pearlescent, iridescent paint job that implied detail and scale, but it was just getting blasted by the bluescreen, so we had to knock some of that down."

Scott had actually worked for VFX producer Doug Trumbull on *STAR TREK: THE MOTION PICTURE*, and he explains that the problems were caused because they were using a different matting technique. "[At ILM] we were shooting bluescreen, so you'd get blue light spilling down the shiny sides of the ships. That was still in photochemical times, and just to get rid of your matte lines was a huge problem. My technique was to go in and daub in powdered chalks on the affected areas. We kept using dulling spray on the side of the ship, and pretty soon it wasn't pearlescent!"

Temporary damage

The biggest challenge Ken's team faced was that the script called for the ships to inflict serious damage on one another. As Steve remembers, the model shop used several different approaches to make sure they didn't actually have to blow up the real models. On the *Enterprise*, the damage was essentially cosmetic. "We didn't actually cut into the model. We added on pieces of adhesive-backed aluminum and then tainted those areas so that, where need be, we could literally peel off the damage." The damage to the *Reliant* was much more serious, so the model shop built larger versions of different parts of the ship that they could happily destroy. The initial battle ended with Kirk blowing up a

dome toward the rear of the ship.

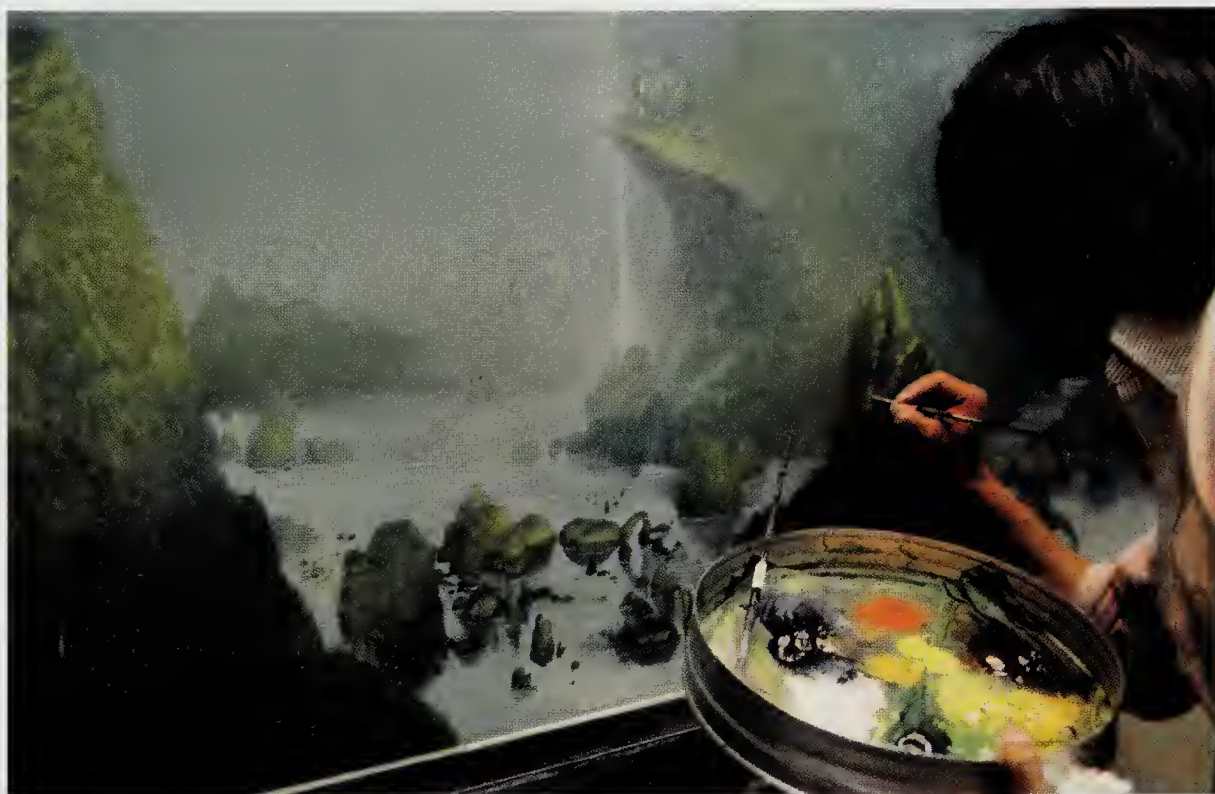
Jim's team was responsible for filming all the bluescreen work that involved the actors. For the shot where Terrell shoots one of the Genesis Project scientists (Jedda) they used a portable bluescreen that they took down to the sound stages at Paramount. First, the shot was filmed without Jedda, so that Jim had a clean shot of the background. Then the portable bluescreen was slid into place, and the actor who played Jedda took up the correct position and acted out his death. In postproduction the two pieces of film were effectively layered on top of one another. Since the bluescreen became invisible, Jedda appeared to be standing in the same shot as Terrell. ILM animator Kim Knowlton then created a disintegration effect that removed Jedda from the frame, leaving the background exactly as it had been filmed on the stage.

Similar techniques were used to combine the small portion of the Genesis cave that was built on the sound stage with the matte paintings that Chris Evans and Frank Ordaz created at ILM. As was traditional, the matte was painted on glass, with a portion left on one side where the live action was projected. The cascading water in the waterfall was created by carving holes in the matte painting to reveal glimpses of a motorized roller that rotated pieces of cotton behind it.

Into the nebula

After Kirk escaped from the Genesis cave, the movie embarked on the biggest single effects sequence – a complicated battle between the *Reliant* and the *Enterprise* that took place in the Mutara Nebula. Twenty years later, this is still a highlight of Ken's career as a VFX supervisor. The first thing he and Bob had to do was determine what the nebula should look like. This was an area in which they felt they had a certain amount of freedom. "There were all these storyboards; I think Mike Minor did them," Ken remembers. "Then we just started getting research material, 'What do nebulas look like?' We looked at the real nebula stuff, but we were all more interested in doing something more fun and more *STAR TREK*, which really wasn't that high-tech, in a weird way. I believe Mike did some color concept art for a starting point, and then I just came up with this thing using a cloud tank. It had a look to it that just lent itself to *STAR TREK*."

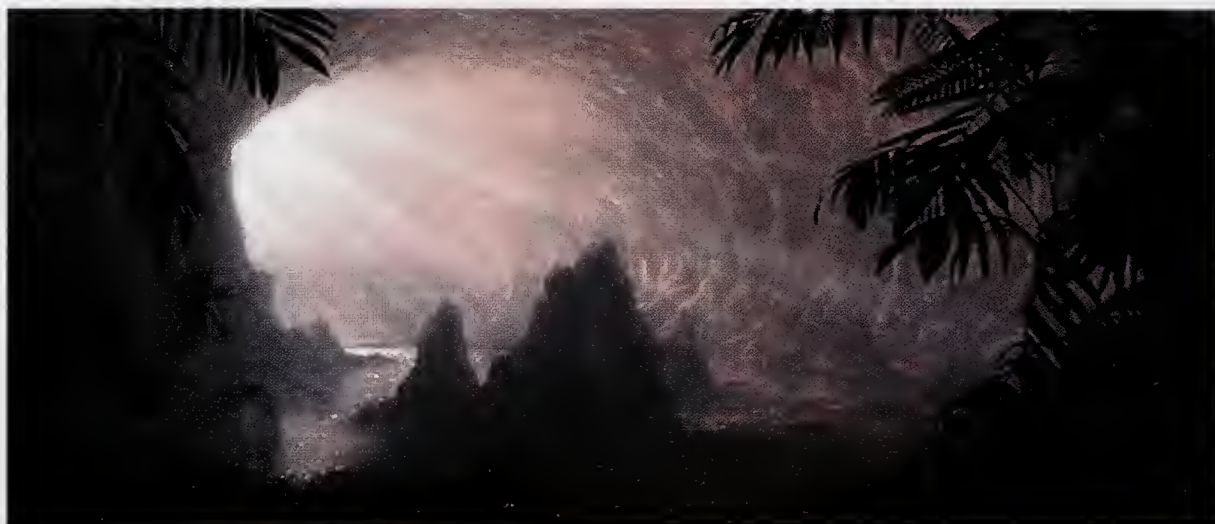
To explain, a cloud tank is basically a large glass container with colored liquid in it. Ken and his team were able to film it and use it as a background they could put behind their



The majority of the Genesis cave was a matte painting that was created by artists Frank Ordaz (above) and Chris Evans, who worked from Michael Minor's concept paintings.



The moving water in this part of the shot was actually cotton that was put behind small holes in the matte painting and rotated so that it looked like frothing water.



The production team were careful to match the lighting in the live-action section to the artificial sunlight that was shown in the matte painting.

Behind the Scenes

starships. This particular tank was something that Ken became very fond of. "It was probably five or six feet deep by eight to 10 feet wide. I used this weird concoction of some kind of [liquid] rubber material mixed with white cartoon paint. It took a lot of care. If I remember this right, you'd put in a layer of salt water, lay a plastic sheet on the top of it, and then you'd put in a layer of just regular water. You would very gently remove the plastic, and the salt would keep an inversion layer where the two met so they wouldn't mix, and that would give you some interesting ways to play with what you did with the rubber. I had these long – for lack of a better description – turkey basters, and to make it more interesting you'd start to kind of churn the layers around a little bit and create these different shapes for it."

Unpredictable shapes

The way the tank was set up, the material inside it was completely white, and all the colors were created by shining lights on it. The colors were actually created by putting colored pieces of plastic (gels) in front of the lights. Ken says the final effect created by stirring the tank and moving the lights depended on his ability to think quickly.

"We had lights set up everywhere for anyone to grab, because I never knew where to place them, and we would have the gels lying around. I'd have to make a quick guess, based on how fast my material was moving. I had an army of people and, as soon as I started to get some weird shapes forming, I would start yelling what colors to throw on and what light to move where. Suddenly, you'd yell, 'That's great; get it out of the way!' Then we would basically shoot as many takes as we could on these things before it turned to mush.

"Sometimes that would happen within 10 minutes; other times you'd have half an hour, depending on what you were doing. Every day was different, everything seemed to affect it! We thought the phases of the moon affected it, because we had no explanation why it would be so different each day." Ken was also able to create flashes of light like lightning that shot through the cloud tank by switching special lights on and off at strategic moments.

Matching shots

The team spent weeks shooting the cloud tank. Some of the shots were created with an eye on the storyboards; for instance, they knew they needed a shot where the *Reliant*



The brightly colored Mutara Nebula was created by filming a cloud tank, which is effectively an aquarium filled with a mixture of rubbery compounds and water.



Once Ken had selected an appropriate background shot of the nebula, he had to recreate the lighting on the models of the U.S.S. ENTERPRISE and the U.S.S. RELIANT.



When the model, the colored lights, and the background footage of the cloud tank were all put together, it created the illusion that the ships were in the nebula.

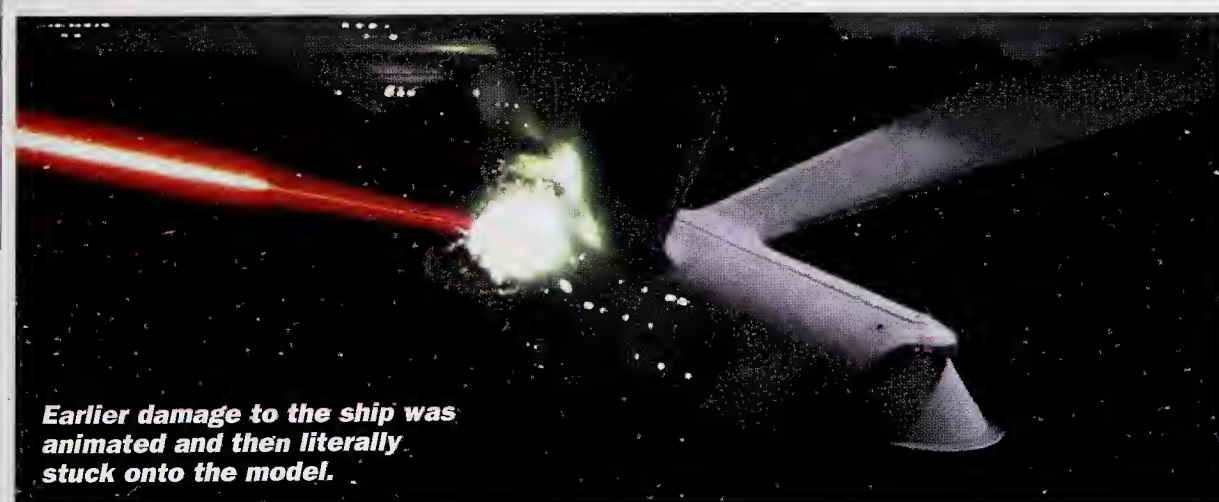
Behind the Scenes



The damage to the neck of the ENTERPRISE was actually carved into a wax replica of this part of the ship that was built specially for this shot, and filmed using stop motion.



In the finished movie, the wax version was indistinguishable from the real thing. Animated effects were added to the shot to make it more dramatic.



Earlier damage to the ship was animated and then literally stuck onto the model.

would move toward the camera, so they shot a matching camera move on the cloud tank. When everything was finished, Ken says they sat down to look through all their footage for shots they could use with the models. "I'd have to go through everything and pick the pieces I thought we could make work for each cut. We had miles of all these interesting abstract shapes. It would be a fascinating art form; forget the movie! We looked through these clips of film, saying, 'OK, well this is 15 seconds or whatever, so we can use that because it's interesting and it has a look that will work with storyboard number whatever it was.'"

Tactical battle

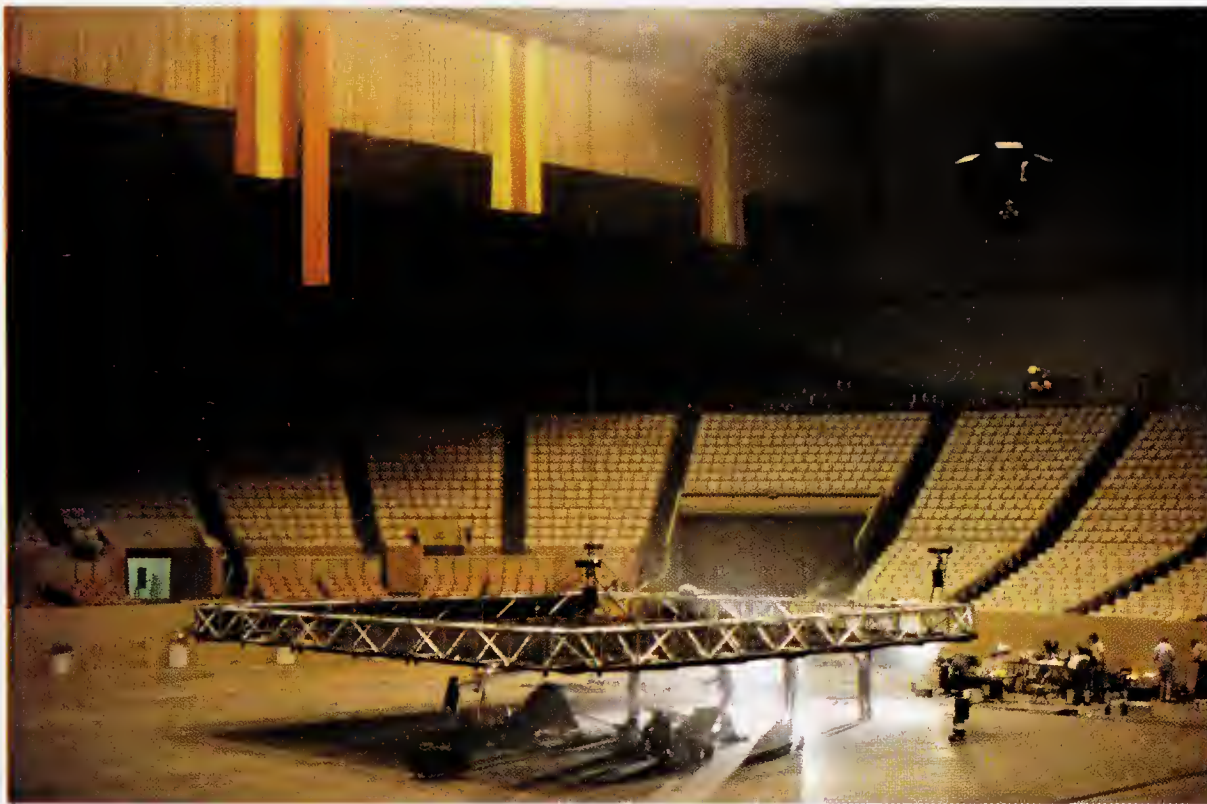
Once the nebula had been filmed, Ken turned his attention to the starships that would be moving around inside it. Because the ships were often in the distance, he was able to use small versions of the models that were specially constructed by the model shop. These were much easier to handle than the full-size models, and could perform bigger maneuvers. When Ken filmed the models, he referred back to the nebula footage he had selected so that he could throw suitable light onto the ships, thus creating the illusion that the ships were actually inside the nebula.

Of course, during this final sequence, the gloves were off, and the script called for the two giant ships to inflict some serious damage on one another. In one of the most impressive shots the *Reliant* fires its phasers at the *Enterprise*'s neck and cuts an enormous gash. This shot was created using traditional stop animation techniques used by Ray Harryhausen, or the makers of films such as 'Chicken Run.' "I had that section done as a wax piece and then painted it to look like the ship," Ken explains. "Obviously, we worked out exactly how the camera was going to move. Then I just went into the wax version, and I would take little sculpting tools and rip stuff up and bend it around. We'd film that, then the camera would move whatever distance it would cover in one frame, and I'd sculpt some more damage. Then, on top of that, we did some animation of a laser hit sort of cutting into it, but it left a real cut – a big scar – which I thought was kind of cool."

Under attack

The damage to the *Reliant* was even more extreme, and involved making several separate sections. "One of the engine pods blows up," Ken remembers. "We couldn't blow up the whole pod for some reason, so I built a shape

Behind the Scenes



The Genesis explosion was filmed at a stadium called the Cow Palace, which had a very high ceiling and allowed the crew to put the camera a long way from their explosion.



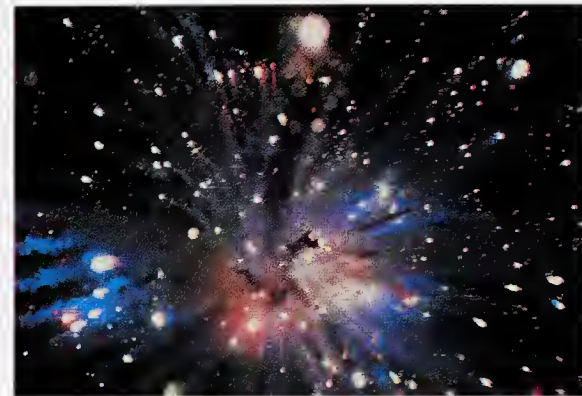
For the final shot, the footage of the explosion was combined with artwork of a blue ring, a starfield, footage from the cloud tank, and the ENTERPRISE going to warp.

similar to it and it was more like glass blowing out of the warp nacelle. We shot that as a separate element and then printed that on top of the actual model of the *Reliant*, with other pieces blowing off of it. Then, when the whole nacelle blows off, that was just a bunch of explosions and a separate arm that we shot using motion control."

The final shot in the nebula, when Khan activates the Genesis Device and generates an enormous explosion that creates a new planet, was handled by Jim and his team. "To do the explosions at the end, we went to the Cow Palace," Scott remembers. "That's a venue here in the south San Francisco area that is basically an indoor stadium with a very high

ceiling that is supported without pillars or posts on the inside. The typical space explosion is an anti-gravity effect. The only way to do that is to explode your pyro compounds directly over a camera, so you're looking straight up at the explosion. When it explodes you don't get a sense of gravity because it's all dropping towards you. All those wonderful little burning bits that everybody loves go flying past camera, and you get this wonderful anti-gravitational interstellar explosion. You never know what you're going to get, because you shoot it at very high speed, so you can slow the explosion down to make it look really majestic."

In theory, that should have been the end of



Because the camera was underneath the explosion, there was no sign of gravity.

ILM's work, but as it turned out they were also involved in one more shot. When the producers decided they needed to see Spock's coffin lying on the Genesis Planet, they sent an ILM crew to get their shot. "That was a last-minute decision," Ken says. "We didn't have any time left. We went to the Golden Gate Park, based on a quick location scout I did. We had the coffin out there and smoke machines and all that stuff, and created this rather lyrical, nice moment."

Fond memories

That final shot was completed within a day and was cut into the final version of the movie, where it offered the audience the hope that somehow Spock might be reborn. For the ILM team, it was the icing on the cake – a final shot they were able to contribute to a movie that they loved working on. In fact, even today, with dozens of impressive movies on his resumé, *STAR TREK II* rates as one of Ken Ralston's favorite jobs. "I've got to say that, out of all the movies I've worked on, that's one of the most fun."

The movie also cemented a relationship between Paramount and ILM that would lead to them working on another five *STAR TREK* movies, creating everything from a humpback whale to the Borg Queen. 🐋



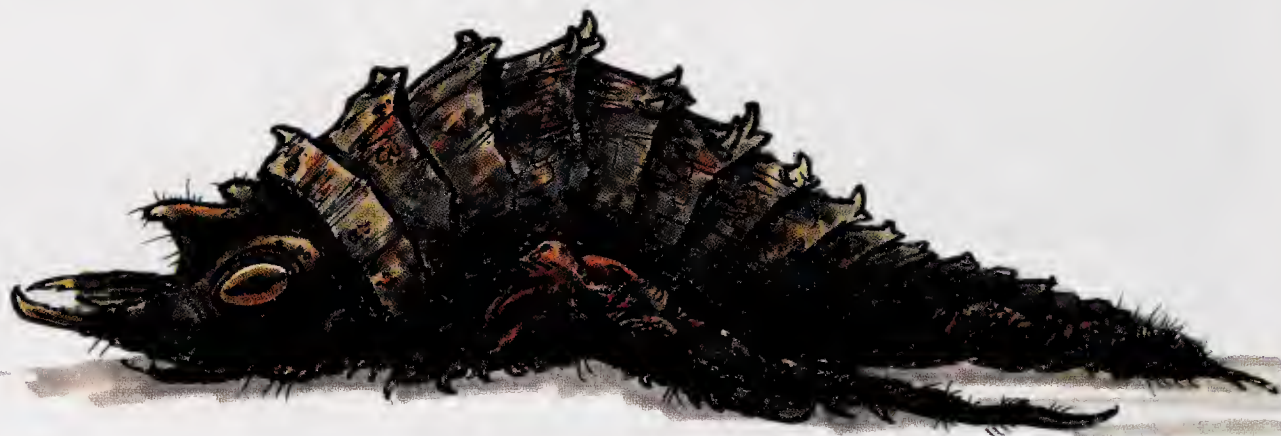
ILM's final contribution was to film the shot of Spock's coffin lying on the surface of the Genesis Planet.

Ceti Eels

They're probably the most disgusting creatures in the history of *STAR TREK*, but their creators loved them. As proud parents Robert Sallin and Kenneth Ralston explain, the Ceti eels were simple puppets that were covered in slime.

The Ceti eels that Khan uses to control Chekov and Terrell were very much producer Robert Sallin's pet project. He came up with the idea of basing them on slugs, and worked with ILM's Kenneth Ralston to decide exactly what they should look like. And, today, if you visit him in his home, you'll see an original Ceti eel sitting on his mantle.

The plot called for eels that were small enough to crawl into someone's ear; Bob was confident this would be disgusting, but he recalls that he also wanted to show something a little more intimidating on screen. "I thought, if they have a mother, then the mother really has to be protecting them." So he asked ILM to design something for him.



The mother creature was designed by one of ILM's visual effects supervisors, Kenneth Ralston. He had a background in creature design and was delighted to have a chance to make such an interesting beast. He also designed the baby eels.

Designer of the beast

Ken Ralston, one of two ILM supervisors on the movie, was the ideal collaborator. He had only just moved out of ILM's creature shop, where he had been making aliens for 'Return of the Jedi,' and was delighted to have the opportunity to design both the mother creature and the baby eels. "I've always been interested in that stuff," he says. "[Animator and VFX expert] Ray Harryhausen is my hero, and this was a perfect opportunity for me to do something different."

He began by producing a series of concept sketches for Bob to look at, and he concentrated on making them look as organic and believable as possible. They finally settled on the 11th design, and Ken set about creating a physical version of their selected critter.

"I sculpted it in clay and cast it in foam," he remembers. "For the shell, since I wasn't really into using topline materials, I just used car Bondo. I did each one of the hard shell segments separately and then glued those on the rubber thing. Those plates are what they

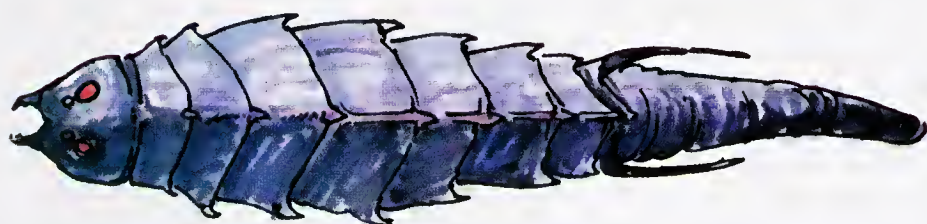
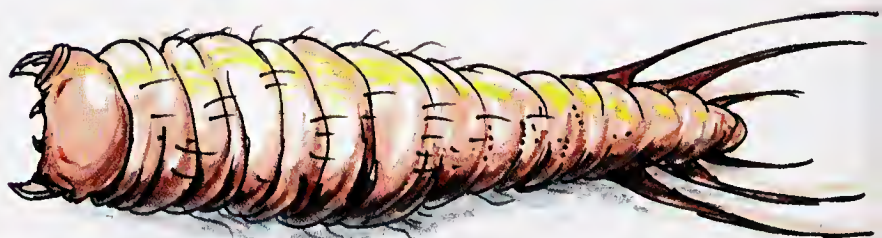
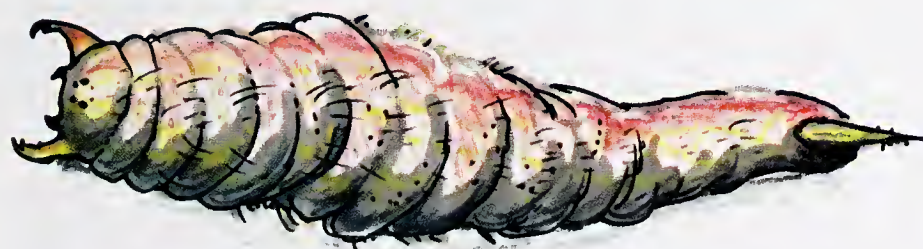
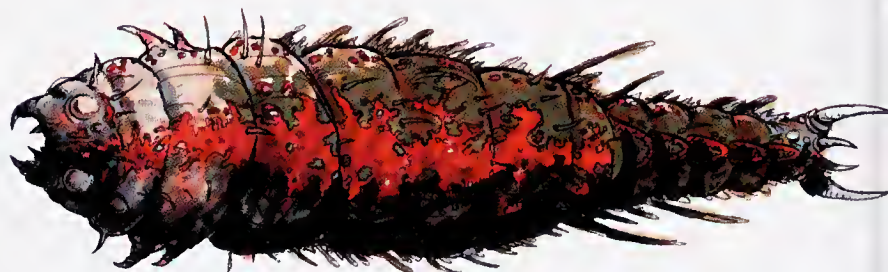


Up close, you can see that the tiny babies that crawled into a human ear were actually smaller versions of the mother creatures. They were made of separate pieces of foam rubber that were connected to one another with very small links.

pulled the little baby eels out of with the forceps. Then I painted it all up, and went off and shot it."

The mother creature was actually a puppet that could be controlled from underneath. Although it looks very convincing on screen, Ken says that it wasn't at all sophisticated.

"We had one rod for moving the back end; the front end was operated by, basically, a tea strainer because it had a rig for opening and closing the jaws. I don't know why I was looking at a tea strainer, but I went, 'Hey, this is so simple; I'll use this!' That's all it is; it's bent around to be in the jaws to open and

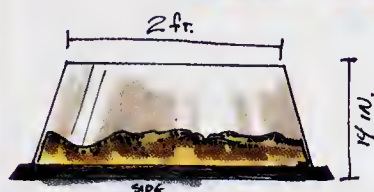


Alternative eels

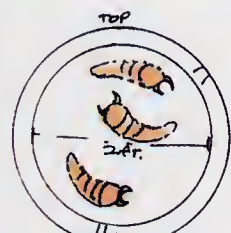
Kenneth Ralston produced a variety of concept sketches for producer Robert Sallin to choose from. His aim was always to make the creatures look as believable as possible, so several of them resemble real creatures. Once the design had been approved, Ken sculpted a study model (known as a maquette) to show Bob exactly what the finished thing would look like.

TO BOB SALIN

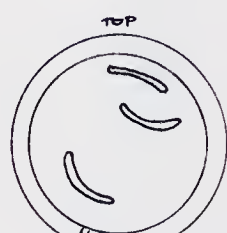
- CETI EEL TANK -



DESIGN OF TANK IS NOT THAT CRITICAL — ONLY THING WE NEED IS A CLEAR, UNOBSTRUCTED VIEW OF INTERIOR AS SHOT FROM TOP.



EEL PLACEMENT



CUT OUT SLOTS IN BOTTOM OF TANK.



MADE OF FOAM — CAN BE VERY ROUGH — CUT FROM POLYFOAM, ETC....



ROD IS GLUED INTO BOTTOM OF EEL — LENGTH DEPENDS ON TANK — AND WORKING AREA BENEATH TANK.

- CETI EEL TANK -

EELS ARE MOVED FROM UNDER SET — AS THEY ARE DRAGGED BENEATH THE PLASTIC — SAND ALSO MOVES, SWELLS, ETC.



WOOD BASE SHOULD HAVE FORMICA SURFACE — ALSO WITH THE SLOTS CUT IN IT — EELS ARE PLACED IN — RODS THRU SLOTS — A TOUGH PLASTIC SHEET IS PLACED OVER THEM [EDGES GLUED TO TANK BASE] AND SAND LAYED OVER IT ALL * PLASTIC SHOULD BE PAINTED TO MATCH SAND TO PREVENT ANY OF IT SHOWING THRU SAND.

A home for the eels

ILM also designed the glass tank in which Khan kept the mother creatures. It was constructed so that the sand could be disturbed from underneath for the shots that were filmed at Paramount, giving the impression that the eels were moving. Another version of the tank was then filmed at ILM, complete with the puppets.



close them. The tongue that blasts out is a red-painted wire that I would just hold separately in my hand and move in and out for a couple of shots. I weighted the tail with some fishing weights, although really you can't see much of that. It was very simple!"

The scenes involving the puppet were actually filmed at ILM. If you watch the movie closely, you'll see that nobody really interacts with them, and we simply see them in closeup in their glass container. Ken says this was in the good old days "when you could do everything" and that, having made the puppet, he was able to both operate it and shoot the sequence.

In the scene, Khan removes the baby eels from the mother's back with a pair of forceps, then drops them inside Chekov's and Terrell's helmets. We then see them crawl across the actors' faces and into their ears.

Behind the Scenes



The 'mama eels' were filmed at ILM using an oversized replica of the tank that had been filmed at Paramount. The puppets could be controlled from underneath and the crew were careful to replicate the original lighting so that everything would match.

Ken says the baby eels were even simpler than the mother creatures. "I never sculpted anything; I just took a piece of foam – I think it was probably leftover from the big eel – and cut it out with fingernail scissors! I made basically a hunk of rubber in a slug form with the smallest little rubber connections between each little segment so it would hold together. It was so simple! I had a piece of monofilament line on the front of it and dipped it in methocel, which is just like an organic, thick muck. Any monster movie you see seems to use gallons of it. You saw 'Alien'? It was just

pouring out of that thing. Gallons of methocel.

"This is where I really lucked out; in one of our tests I just laid it on a guy's face and pulled the wire. I hadn't planned it, but the methocel acted almost like a slight glue so the front of the eel would move forward and then, just when the tension got a little too much, the back end in that muck would catch up to it, so it looked like it was inching along. Lucky for me that it worked out that way."

The slimy eels that Ken pulled across the actors' faces were obviously lifesize, and they



The puppets were not particularly complicated. The baby version of the eel had a red tongue, which was actually a simple wire that Ken could move around with his fingers.

weren't detailed enough to stand up to a closeup. So, when we needed to see a bloody eel emerge from Chekov's ear, Ken needed a bigger, more detailed, puppet. This version was just over six inches long and had the same control mechanisms as the mother creature. And, since the eel was bigger, Ken needed a bigger ear for it to emerge from.

Enormous ear

"We made this huge ear; it was about three feet long," he says. "That was used for one quick closeup, maybe two, where this thing is crawling into or out of Chekov's ear. They were planning another shot that luckily we talked them out of – no one would do this except as a joke; there was going to be a shot from inside of his ear! It was like, 'How did you get the camera in there?!'"

Of course, when you have a huge rubber ear lying around the sound stage, inevitably someone is going to think of a joke or two. "Oh yeah," Ken says. "Somebody created a giant Q-Tip and left it stuck in it!"



For the shot where the eel leaves Chekov's ear, Ken built a massive replica of his ear and pushed a large version of the puppet (which was covered in 'blood') through from the other side.

Dr. Carol Marcus

Dr. Carol Marcus, creator of Project Genesis, was a distinguished scientist noted for her expertise in molecular biology. Her commitment to her work overshadowed every aspect of her life – a dedication shared by her son and colleague, David.

Dr. Carol Marcus was one of the leading molecular biologists in the Federation: a scientist who devoted her life to her research. She decided upon a career in the sciences at an early age, and let nothing get in her way.

Single mother

In the early 2260's Carol became involved with a young Starfleet officer named James T. Kirk, and in 2261 she gave birth to their son, David. However, she felt that they had no basis for a lasting relationship, with Kirk traveling around the universe while she worked in a lab, so she asked that Kirk leave her alone to raise the boy. That they both cared more for their careers than they did for each other was never disputed. As Carol saw it, she and Kirk lived in entirely different worlds, and she wanted her son to be raised in hers.

Carol continued with her work. She enjoyed much success, and in 2284 she proposed the most ambitious and potentially dangerous of her plans to the Federation: Project Genesis. Once her proposal was accepted for



Dr. Carol Marcus was a fiercely independent woman and a brilliant scientist who spent much of her life developing the Genesis Device.

Federation funding, she began a three-stage development process, accompanied by a highly skilled team of scientists which included her son, Dr. David Marcus.

Plans halted

She and her team made remarkable progress and by 2285 they were ready to try out their new invention. However, before they could find a suitable planet on which to test the

Genesis Device, Khan Noonien Singh and his band of 'supermen' intervened, bringing Kirk back into her and David's lives.

Outraged

Though she didn't share her son's mistrust of Starfleet, she was incensed when told that her project and all her files were to be taken by the crew of the *U.S.S. Reliant NCC-1864*, under orders of the now-Admiral Kirk. She was

determined to fight this unexpected incursion into her territory, though she was willing to give her former lover the benefit of the doubt. When it turned out to be Khan, not Kirk, who stole the Genesis Device, she gratefully accepted Kirk's assistance.

Work before romance

Throughout the quest to save the device from Khan's evil plans, it was apparent that, although Carol Marcus still felt affection for Kirk, her true love was her work. Even as havoc was erupting all around, she gazed on the glory of the Genesis Planet forming exactly as her specifications and years of research had indicated it would. The Genesis Project appeared to be a success, and her pride in her work was unmistakable.

The encounter with Khan gave Carol the opportunity to tell David who his father was and to mend some old wounds between her and Kirk. When her son was later killed by Klingons on the Genesis Planet, Carol was left with her projects and her research, the life that had sustained her for many years.



Carol was determined to raise her son without Kirk's help, and under her influence David grew up to share her love of science.



A relationship between two people as dedicated to their work as Carol Marcus and James Kirk had little chance of lasting, but they still cared about each other.



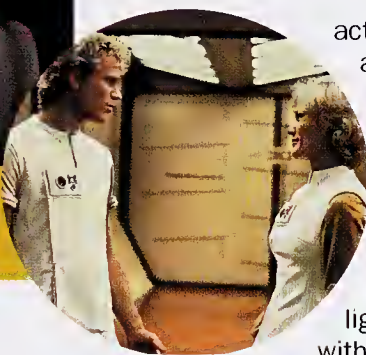
Dr. Marcus looked on in awe as the Genesis Planet formed, but her pride was to be short lived as the planet ultimately broke apart.

Dr. David Marcus

As the son of James T. Kirk, David Marcus shared many of his father's qualities, including a determination to succeed. However, he was also impetuous, a trait that led to the failure of Project Genesis and ultimately to his death.



David was very close to his mother after she had raised him on her own, and they shared a dedication to, and a passion for, scientific research.



The son of James T. Kirk and Dr. Carol Marcus, David Marcus was born in 2261. He grew up in a single-parent environment with his mother, immersed in a world of scientific research. David knew that Kirk was once part of his mother's life, but the boy had no idea that the famous Starfleet admiral was his father, nor that his mother effectively banned Kirk from his life.

High flyer

David's professional choices were heavily influenced by his mother's status; by the age of 23 he had earned his doctorate and soon became a member of his mother's research team.

In 2284 David began work on Project Genesis with his mother. As they progressed, traces of his

father showed in David; he was impatient for results and eager for solutions. This led him to employ protomatter, denounced by many scientists as hazardous and highly unstable. Nevertheless, it appeared to solve the problems.

David's closeted scientific world was interrupted when Khan Noonien Singh, took control of Chekov and forced him to announce that he was taking Genesis away from Carol's team on orders from Kirk. This threat was part of Khan's ruse to lure Kirk to them, and it provided the volatile backdrop to the first meeting between father and son.

This encounter actually began as more of a confrontation; David displayed the same eagerness for

action as his father when he attacked the admiral with a knife, presuming that Kirk's intent was to take Genesis. Carol intervened, and it was after seeing her that Kirk guessed David was his son. David got a chance to see his father in a more positive light when Kirk battled it out with Khan. David remained on the bridge of the *U.S.S. Enterprise NCC-1701*, acting as advisor on the Genesis wave, and was impressed by his father's courage and abilities.

Admiration

After this brush with death, David showed his compassion by trying to comfort the man he once despised, when Kirk was grieving over the death of Spock. David apologized to Kirk for misjudging him and added, "I'm proud, very proud, to be your son."

Shortly afterward, David was assigned to the *U.S.S. Grissom NCC-638* with Lt. Saavik to study the planet created in the Genesis explosion. At first, he was thrilled with the array of environments,

but when he beamed down for a closer look he found the planet in a state of environmental chaos, and recognized the cause as being the protomatter's instability.

David's naiveté showed through when a group of Klingons arrived and demanded the Genesis Device. He honestly believed the Klingons wouldn't harm them because, as a planet-building device, it was an obvious failure. To the Klingons, however, Genesis was a powerful weapon, and a hostage was selected to die as proof of their serious intent.

As a d'k tahg knife was raised to Saavik's neck, David lunged toward the Klingon in a burst of courage which might have been expected of his father. However, he lacked Kirk's fighting prowess, and was killed with a single thrust of the three-bladed knife.

David Marcus's untimely death in 2285 was the result of his youthful impatience and fiery temper – a perilous combination. He had a brilliant future ahead of him, but he was unable to curb his excitable disposition, and this lack of control cost him his life.



David attacked Kirk when they first met, little realizing that he was his father.

As David got to know his father, his hostility toward him faded and he became proud to call himself Kirk's son.

David was killed when he tried to defend Saavik from an armed Klingon.

The Genesis Device

The Genesis Device was a short-range torpedo that was designed to create a completely new biosphere suitable for humanoid colonization. Unfortunately, it also had the potential to be a weapon of unprecedented destruction.

In the wrong hands, the Genesis Device could wipe out every living thing on a planet, so when Khan tried to steal it Dr. Carol Marcus asked Admiral Kirk to help her science team protect it.



The Genesis Device was a sophisticated technological innovation designed to alleviate sociological problems such as overpopulation and limited food supplies. It was developed by a team of scientists led by Dr. Carol Marcus and her son, Dr. David Marcus.

The device initiated a process of rapid terraforming, by which previously uninhabitable worlds could be turned into Class-M

planets ready for colonization. This was accomplished by launching the Genesis Device, which was torpedo-shaped, into a lifeless planet. Upon impact, the device caused a massive explosion, reducing the entire area to subatomic particles. A preprogrammed matrix then reassembled these subatomic particles into the desired configuration, creating an atmosphere and environment in a matter of

hours that was inhabitable by humans, whatever the test area's original composition.

Step by step

Development and testing of the Genesis Device took place during a year-long period on a space station orbiting Regula, a Class-D planetoid. Tests were carried out by Dr. Carol Marcus and her team in three stages, the first of which involved experiments conducted

in a laboratory on the space station. In the second stage, the device was deployed within a lifeless underground cavern deep inside the Regula planetoid. The intention of the third stage of testing was to introduce the device to a lifeless space body, such as a moon or barren planet.

Unfortunately, if the device was detonated where life already existed, it could prove to be the most powerful doomsday weapon

Briefing: Project Genesis

ever invented, destroying all life in favor of its new matrix. This possibility seemed to catch its creators off guard, and they were unprepared for the consequences when Khan Noonien Singh stole the device and detonated it aboard the *U.S.S. Reliant NCC-1864* in the middle of the Mutara Nebula. The resulting cataclysmic explosion reorganized the matter that constituted the nebula and formed a new planet.

Short-lived planet

Within an extremely short time, fully developed plant life emerged, but this seemingly tranquil planet had a highly unstable core caused by the inclusion of protomatter in its Genesis matrix; this resulted in it aging rapidly. The planet

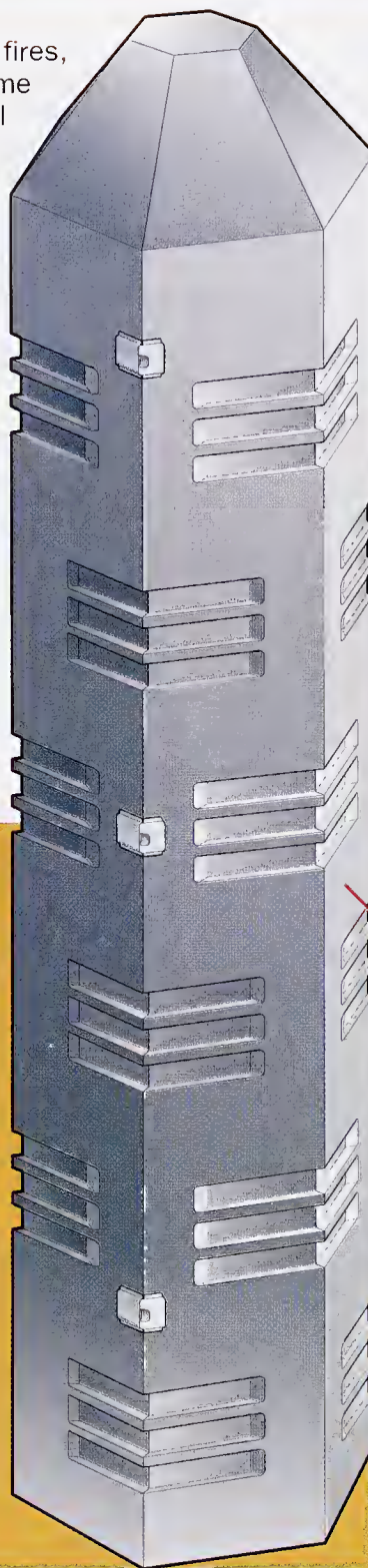
suffered from wind storms, fires, and earthquakes that became more and more violent, until it literally tore itself apart in an explosion almost as tremendous as the one that had created it, destroying the life that had so recently been created.

The price of failure

Ultimately, the Genesis Device was a grand experiment that failed. The use of protomatter in the matrix was mainly responsible for this, but a series of factors, including the theft of the device and its use in an unintended setting, were also to blame.

DOOMSDAY WEAPON

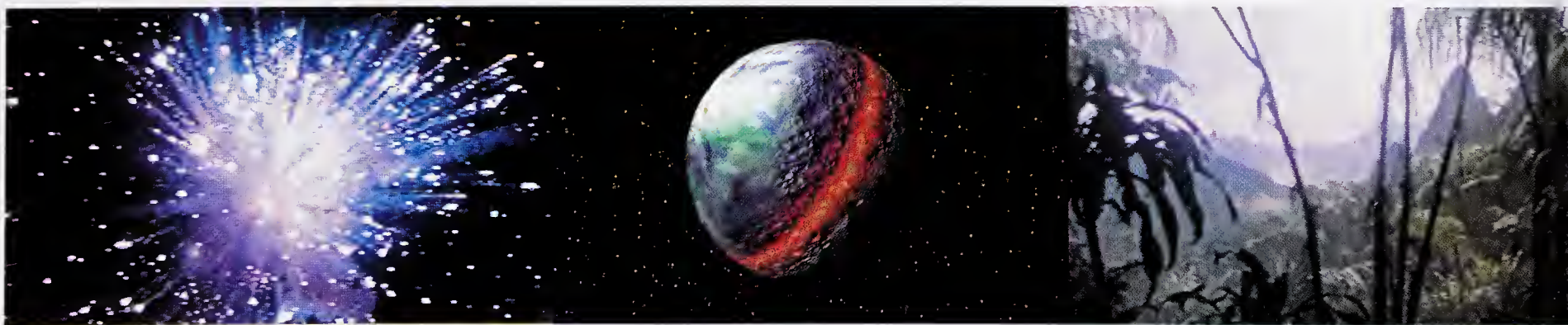
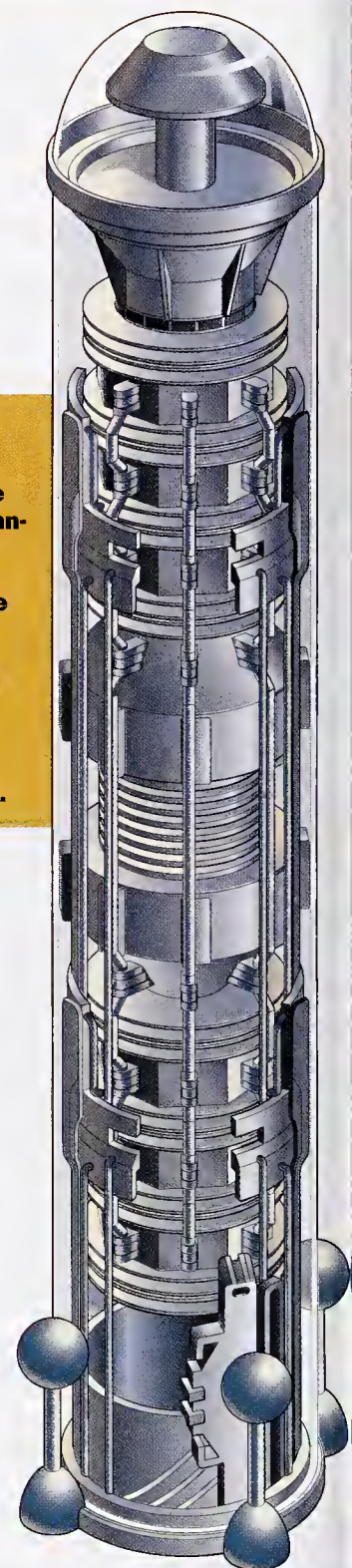
Khan stole the Genesis Device with the intention of using it as a weapon against his old adversary James Kirk. Khan activated the device, which was in the transporter room of the *U.S.S. Reliant NCC-1864*, by remote, using this console on the bridge which began a countdown of four minutes. Luckily, the *U.S.S. Enterprise NCC-1701* managed to clear the area before the device detonated, and the resulting explosion created the Genesis Planet from the matter in the Mutara Nebula.



LIFE-CREATING DEVICE

Upon detonation, the Genesis Device instantaneously created the 'Genesis effect' through a large-scale explosion similar to that of a nuclear weapon. Matter was then reorganized according to a pre-programmed matrix, and life was created.

The Genesis Device was concealed within an outer casing, and was designed to be fired from a ship, like a photon torpedo.



A new planet was created after Khan detonated the Genesis Device in the Mutara Nebula.

The 'Genesis effect' spread across the planet like a wave, creating an inhabitable Class-M world.

A variety of ecosystems, capable of supporting humanoid life, soon developed on the planet.

The Genesis Cave

The completion of stage 2 of Project Genesis resulted in a pocket habitat tucked away beneath the surface of the Class-D Regula planetoid.

The Genesis cave, a Class-M habitat enclosure beneath the surface of the Regula planetoid, was created during the field tests of the Genesis Project. A prototype Genesis Device was detonated deep inside the lifeless, Class-D planetoid, resulting in a subterranean cavern teeming with life. The ecosystem abounded in nutritious plant life, and was capable of sustaining humanoid life forms indefinitely.

Secondary cavern
An antechamber to the Genesis cavern measured approximately 350 cubic meters. According to Dr. Carol Marcus, it took the Starfleet Corps of Engineers 10 months to carve it out of the unyielding bedrock of Regula. It was a utilitarian area, with adequate life support and the bare minimum of emergency supplies. It was in bleak contrast

to the Genesis cavern itself, and yet at the same time served as a clever blind to those unaware of the scope of the project: visitors beaming down to the planetoid could be forgiven for mistaking this area, with its breathable atmosphere and no obvious life-support equipment, for the spoils of Genesis. In fact, the device created an altogether more impressive habitat.

A new Eden
At the end of this unwelcoming antechamber was the Genesis cavern, which Dr. Marcus and her team created in just one day. Accessed through secure doors, the corridor led onto a mountain ledge, which looked out over a breathtaking vista that stretched on for several kilometers. Small hills in the middle distance were surrounded by a tranquil lake, and the whole scene was illuminated



Captain Kirk and a landing party from the U.S.S. ENTERPRISE NCC-1701 were overwhelmed by the beauty of the Genesis cavern and were impressed with the abundance of fruit-bearing plants that grew there.

by a natural phosphorescence that gave the illusion of sunlight. Lush vegetation abounded, and the terrain ranged from verdant forests to tumbling waterfalls to snowcapped peaks. A fine mist drifted over the landscape, making the whole scene reminiscent of Earth millions of years ago: an innocent and untouched environment. The habitat was a perfect miniature of the most mesmerizing landscape, and it awaited the human inhabitants who would bring vitality and meaning to its existence.

Welcome retreat
In 2285 Admiral Kirk and his landing party had to take refuge in the Genesis cavern for two

hours while the U.S.S. Enterprise NCC-1701 was struggling to reactivate its transporters after it had been attacked. Even in the midst of a crisis, the Starfleet officers were moved to introspection and reflection by the cavern's beauty and serenity, and they happily partook of the food – Earth-type fruits that had grown in the virgin environment.

Unknown fate
The eventual fate of the Genesis cavern, which appeared to be more stable than the Genesis Planet that was created later, remains unknown, or as highly classified as the experiments that led to its initial creation.



The Genesis cave was a vast chamber inside the Regula planetoid that was filled with lush plantlife; it was truly "life from lifelessness." Some of the habitat inside the Genesis cave resembled that of a primeval forest, with dense vegetation, lakes, and swirling mist. Water is vital to almost all forms of life, and it poured through many parts of the Genesis cave, helping to sustain the abundant plantlife.

Regula I: Interior

The interior of the Regula I space station featured a number of laboratories, including a thermonics facility where the scientists on Project Genesis carried out most of their work.

The Regula I Space Laboratory contained a number of facilities that allowed Dr. Carol Marcus and her team to research and develop the controversial Genesis Device. Primary control of operations was undertaken from Dr. Marcus' main lab, but the station was compartmentalized into hundreds of discrete sections and modules, connected by corridors with large automatic doors.

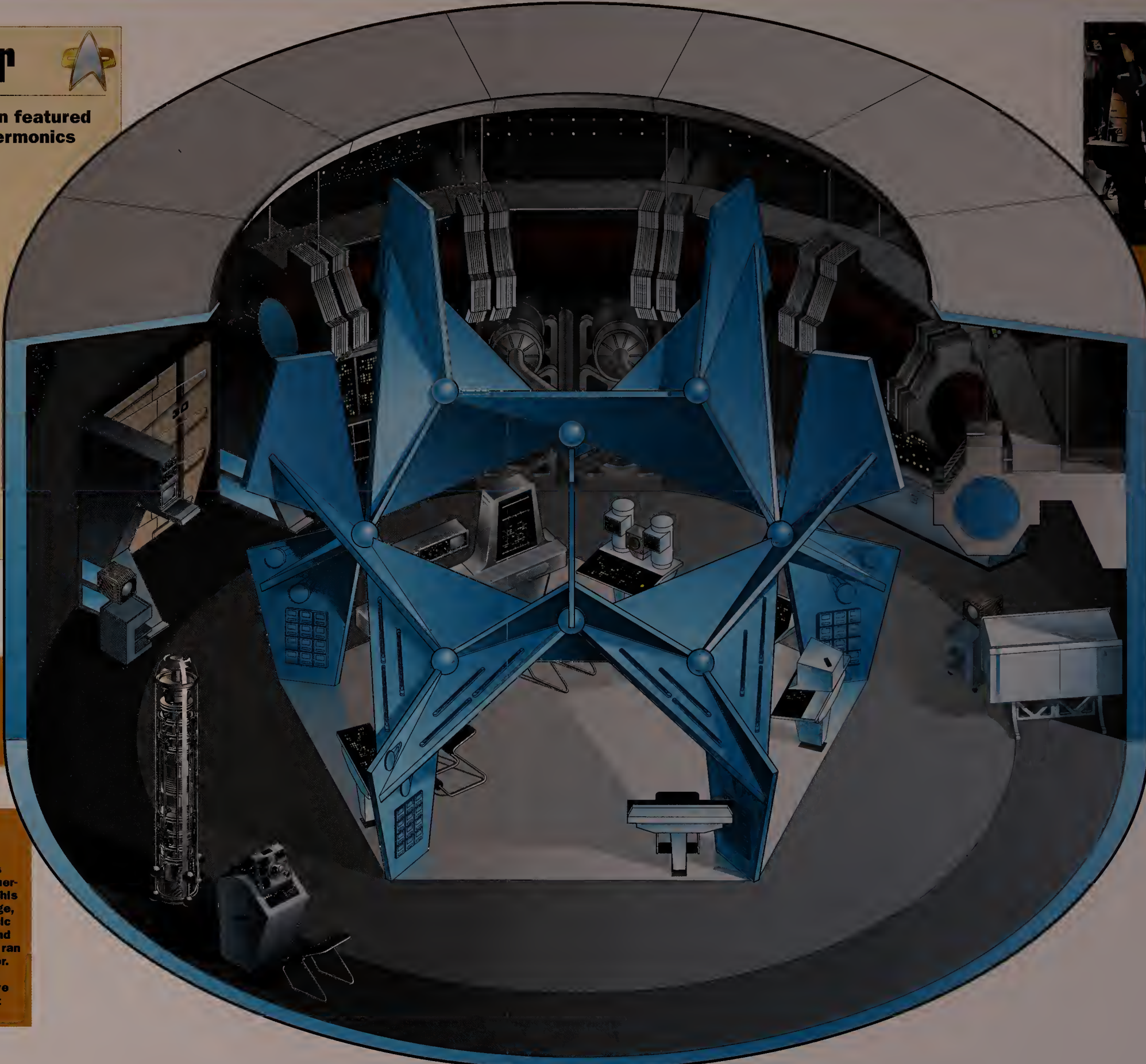
Configuration and layout

There were several separate laboratories on board Regula I, including facilities studying geological sciences such as tectonics and geoplastics, and more exotic disciplines such as synthostasis and thermonics. The station's highly advanced sensors suite also had its own lab; because of the intricate nature of Regula I's work, the accuracy of its sensor readings was of the utmost importance to the research. The platform also featured a powerful computer system and a wide-ranging databank; the Genesis Project involved the systematic reordering of matter into different forms, and thus the controlling system behind it had to be able to map an entire ecosphere down to the molecular level.

POINTING THE WAY
The modular nature of Regula I's design could be seen by the way identical sections were joined together to expand the structure. As much of the interior looked the same, location markers to various departments such as thermonics, geoplastics, JBK sensors, and synthostasis were clearly stenciled along the corridors.



PRIMARY FACILITY
The majority of Project Genesis was undertaken in the thermonics laboratory. This room featured a large, blue-colored geodesic support structure and a wide corridor that ran around the perimeter. This latter feature made it easy to move pieces of equipment between facilities.



WELL EQUIPPED
The thermonics chamber was roughly circular and built on two levels, with the majority of the equipment on the lower level. It was comprehensively equipped, with several wall-mounted and freestanding computer terminals, but it nevertheless offered a spacious and pleasant working environment.

Briefing: Project Genesis

Regula I Space Laboratory

Home to the Project Genesis science team, **Regula I** was a deep space facility orbiting the planetoid **Regula** in the **Mutara Sector**.

Regula I was a large science facility used by the team engaged in Project Genesis in 2285. It had a modular design and could be used for functions as diverse as Starbase operation, medical centers, and orbital construction facilities. But these types of platforms were most often seen housing scientific concerns, such as Project Genesis or the research center on Science Station Tango Sierra.

Main features

The station's main laboratory facilities were located within the conical main hull, but beneath this was a ring and corridor array that connected a number of disk-shaped modules; the mid-section featured a Federation standard docking collar for use by shuttlecraft or travel pods. The various modules could perform a number of different functions — one of the units connected to the Regula I platform had an additional dome mounted on it, possibly to house a telescope array. The other modules could act as quarters for the station crew, as well as an infirmary, briefing room, and mess hall. Other facilities on the station included at least one eight-person transporter room and a number of escape pods. The Regula I space laboratory could be adequately manned by only eight personnel, but it had the capability to house many more, with a possible total complement in the hundreds.

The lower decks of the station extended into four tubular rods; these sections contained the power supply, and storage for the materials used in the project.

RESEARCH AND DEVELOPMENT
Regula I orbited the planetoid Regula in the Mutara Sector; the station was a scientific platform operated under the auspices of the Federation Science Council, and was used to conduct research into the development of the radical terraforming technology known as Project Genesis.

ADAPTABLE DESIGN
Regula I's structure was modular, and the success of its highly flexible design led it to be used on a number of other Starfleet facilities, including the San Francisco Shipyards and the Apgar Research Station orbiting Tanuga IV.

SECONDARY RING
The central ring beneath the large main hub incorporated numerous facilities, including a docking port for travel pods, crew quarters, and observation rooms. The infirmary, mess hall, and briefing lounge were also found in this lower section.

PROJECT GENESIS PERSONNEL
Managed by operations director Dr. Carol Marcus, the Project Genesis team also included her son Dr. David Marcus and scientists Jedda, Madison, and March. Regula I served as their base for the first two development phases of Project Genesis, while they awaited news of a suitable lifeless planet where the final stage could be tested.

HOME TO PROJECT GENESIS
The Regula I platform was a huge facility equipped with a variety of laboratories, testing facilities, and research departments dedicated to the development and implementation of Project Genesis.

DISCUSSION AREA
The central area in the main science laboratory was often used as an informal meeting place for Dr. Marcus and her fellow scientists. Regula I had a comparatively small population of scientists, due to the secrecy of the operation.

DRAMATIC BACKDROP

The vast waters of the Pacific Ocean provided the backdrop for the U.S.S. Enterprise when it was launched in 1962. The ship was built at the San Francisco Shipyard and was the first of the U.S.S. Enterprise-class ships to be built.

Genesis Planet

Created by the unplanned detonation of the Genesis Device in the Mutara Nebula, the Genesis Planet had a variety of environments that were capable of supporting life, but it quickly became dangerously unstable.

The Genesis Planet was created from the gaseous matter in the Mutara Nebula when Khan Noonien Singh detonated the Genesis Device during a fierce battle with his old adversary, Admiral Kirk.

Out of bounds

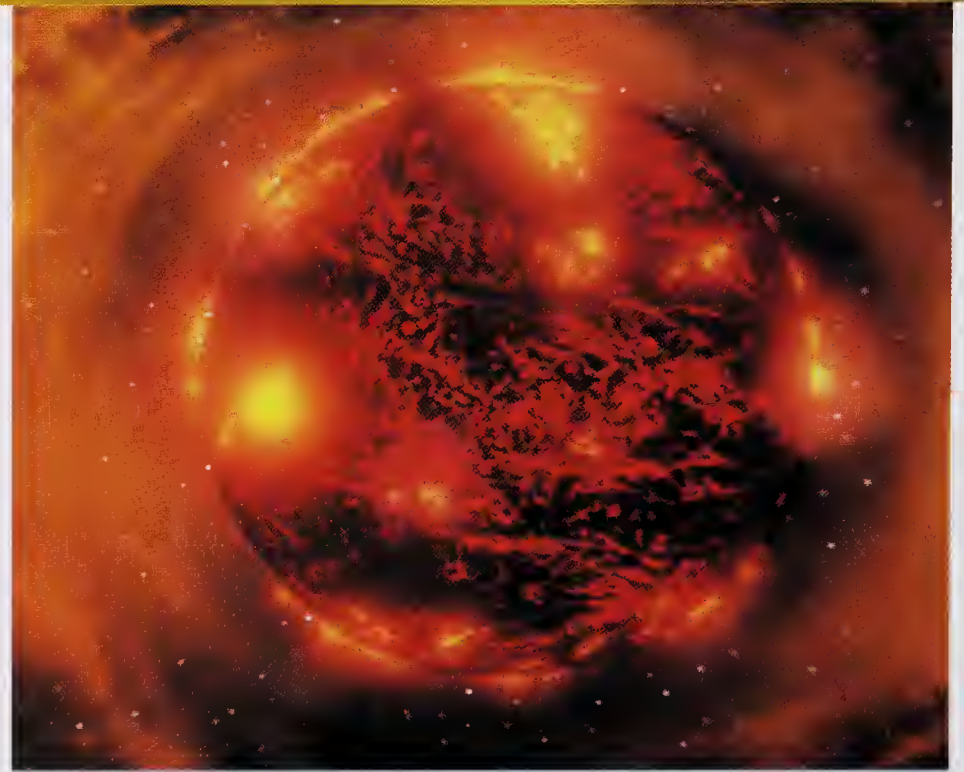
The Genesis Planet immediately became a galactic controversy, and Starfleet declared it off limits until the Federation Council decided what to do. In the meantime, the *U.S.S. Grissom* NCC-42857 was dispatched with a scientific team that included the planet's co-creator, Dr. David Marcus, to carry out a thorough investigation.

Initial scans of the new planet indicated that sector 1 had foliage in a fully developed state of growth and that the temperature

was 22.2 degrees celsius. Sector 2 had desert terrain, with minimal vegetation and a temperature of 34.4. Sector 3 was made up of subtropical vegetation, although when they arrived the temperature was rapidly decreasing, leading to snow in the same sector. All varieties of land and weather known to Earth were detected – all within a few hours walk of one another.

Closer investigation

They also detected Spock's coffin, which had soft-landed on the planet, and animal life forms. As David Marcus had told them that Genesis was not designed to create living creatures, he and Lt. Saavik decided to beam down for a closer look. Once on the planet surface they found an idyllic environment similar to the one that had been created in the cave in



A red-hot swirling ball of gaseous matter that later formed the Genesis Planet was created after Khan Noonien Singh detonated the Genesis Device while his ship was inside the Mutara Nebula.

the Regula planetoid. They also detected low levels of radiation and discovered Spock's coffin covered in microbes lying amid ferns and plants.

Turn of events

Just as they thought that they had uncovered the mystery of the life forms, they heard a pained cry in the distance. As they set off in the direction of the cries, the ground beneath them began to

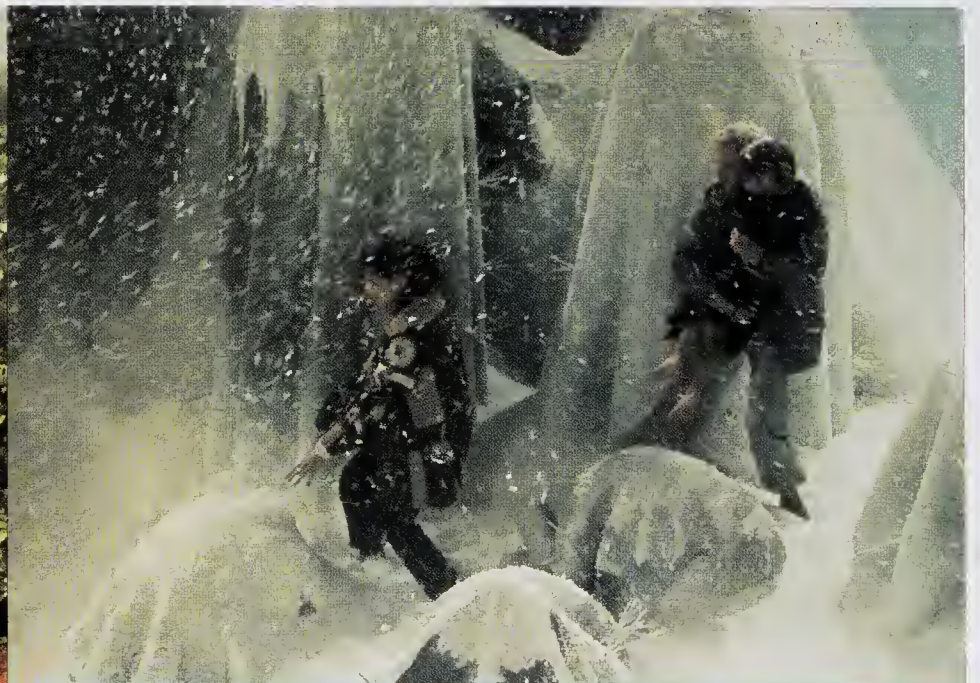
shake and the temperature began to drop dramatically. It soon became clear that the Genesis Planet was not the paradise they had first thought

Deterioration

Unstable protomatter, used in the matrix's construction by David Marcus in his haste to complete the Genesis Project, caused the ecosystems it had created to become dangerously erratic. This



When Dr. David Marcus first beamed down to the Genesis Planet, he was greatly excited by what appeared to be an idyllic environment, but, because of the use of protomatter in its construction, it soon became unstable.



David and Saavik found a Vulcan boy in the middle of a snow blizzard on the planet surface and they realized that Spock's body had been regenerated by the Genesis effect and, like the planet, he was aging at an accelerated rate.

Briefing: Project Genesis

Giant microbes

A number of microscopic life forms – inadvertently sent to the Genesis Planet on the photon torpedo casing used as a coffin for Spock's body – gave an extraordinary insight into the rapid evolution that the new world experienced. Once on the surface of the planet, the microbes were subjected to the Genesis effect, and in just a short time they had undergone an incredible increase in body mass to become the size of a human hand. A few hours later, when the Klingons arrived, they had grown to a few meters in length, with thick bodies. When Kruge picked one up it tried to wrap itself around him, much like a python snake, but he crushed it to death.



When Dr. Marcus found the microbes, they had become gelatinous-like life forms.

When the Klingons arrived on the planet, the microbes had grown to a few meters in length.

A microbe appeared close to strangling Krug before he gained the upper hand and killed it.

instability manifested itself first in an accelerated rate of growth, then in microclimatic upheavals. Instead of flourishing, the planet was rapidly disintegrating.

Back from the dead

After walking through a snow blizzard, Marcus and Saavik found a young Vulcan child who could only have been Spock, somehow rejuvenated by the Genesis effect. Even more incredibly, as the planet aged, so did Spock; they

appeared to be linked together, and the only way to stop this process was to remove him from the planet. However, before Saavik and Marcus could transport him aboard their ship, it was destroyed by a crew of Klingons led by Commander Krug, who had learned of the Genesis Device and wanted to uncover its secrets because of its potential as a weapon.

When the *U.S.S. Enterprise NCC-1701* arrived, Marcus was

murdered, and the Klingons captured the *Enterprise* – which Kirk had set to self-destruct.

Dying world

With the planet reaching critical mass, Spock finally achieved the age he was just before his death on the *Enterprise*. Krug, still alive on the Klingon *Bird-of-Prey* and angry at the death of his comrades, beamed down to the planet to confront Kirk. Despite the evidence all around them –

the volcanic activity and the wild weather – he did not believe what Marcus had told them: that Project Genesis was a failure.

While the planet tore itself apart, Kirk and Krug fought to the death. Finally Krug fell into a lava pit, and Kirk managed to beam up to the Klingon *Bird-of-Prey* – now under the control of his own crew – before the final, explosive break-up of Genesis. The Galaxy's newest planet was no more.



Admiral Kirk and Krug fought each other while the planet tore itself apart, revealing gaping chasms and red-hot magma flowing beneath the surface.



Kirk and his crew managed to escape with Spock in a Klingon BIRD-OF-PREY as the Genesis Planet broke up in a huge explosion.

The KOBAYASHI MARU Scenario

The *Kobayashi Maru* scenario was designed to test the character and resolve of Starfleet cadets by placing them in a simulated no-win situation.

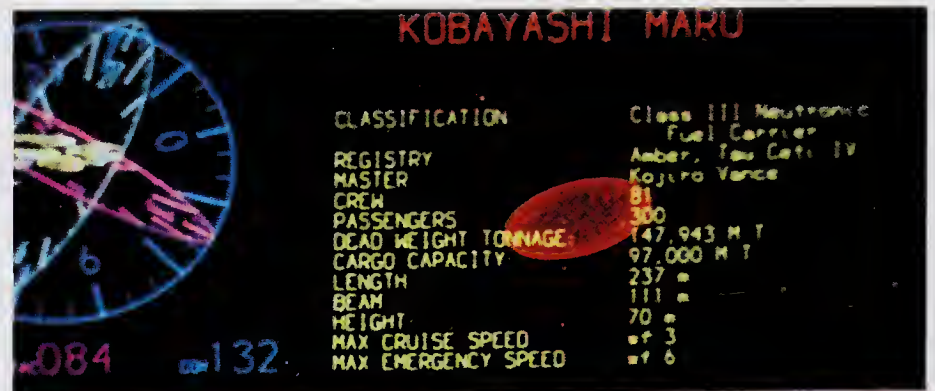
The *Kobayashi Maru* scenario was a computer simulation that was designed to test command-track cadets at Starfleet Academy in the late 23rd century.

Distress call

It took place on a replica of a starship bridge, with cadets manning many of the key positions, including the captain's chair. The exercise began routinely, with their starship appearing to travel close to the Klingon Neutral Zone, but soon after establishing coordinates it was hailed by a Federation

freighter that was under attack. The vessel was the *Kobayashi Maru*, and it was a third-class neutronic fuel carrier. It was established that there was a crew of 81, plus 300 passengers. The *Kobayashi Maru* gave her coordinates, and was found to be disabled somewhere within the Neutral Zone after having struck a gravitic mine.

In order to assist the distressed ship, the cadet in command had to decide whether or not to break the treaty and enter the Neutral Zone. Many cadets attempted to send out a distress call to neighboring starships for assistance,



The KOBAYASHI MARU scenario took place on a simulated Starfleet bridge that was identical to the real thing; all the details of the mission were displayed on the viewscreen to make it as lifelike as possible.

but they soon discovered that they were the only starship within range of the crippled vessel.

Into the Neutral Zone

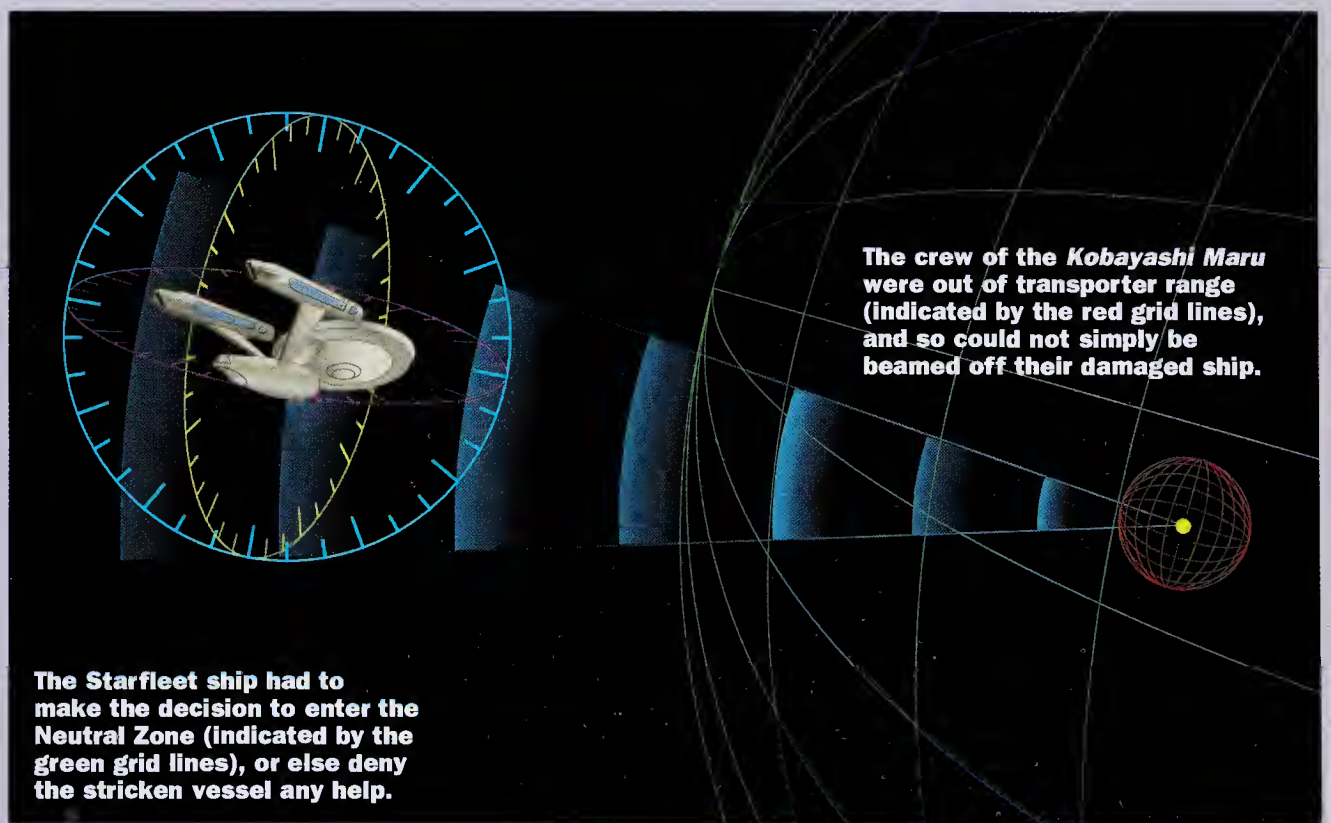
If they made the decision to try and rescue the crew of the *Kobayashi Maru*, the scenario unfolded rapidly. The cadets were informed that they were in violation of the treaty, and the captain duly noted this in the mission log. As the starship entered the

Neutral Zone, the coordinates of the *Kobayashi Maru* were reconfirmed, but communications with it were lost. As attempts were made to reestablish contact with the crippled vessel, sensors picked up three well-armed enemy starships on an intercept course, or decloaking, nearby.

As the enemy ships armed their torpedoes, the cadet in the captain's chair usually made an effort to establish contact with

A no-win situation

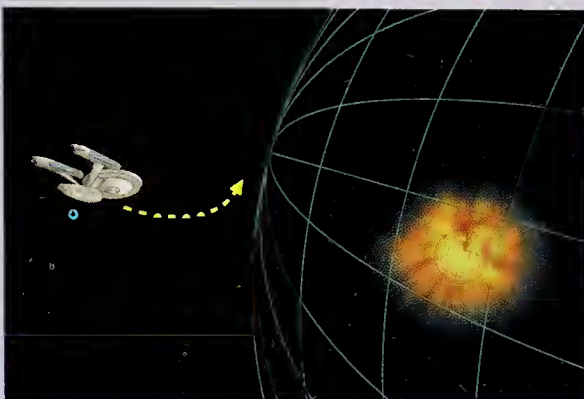
The *Kobayashi Maru* scenario was deliberately structured to offer no ideal solution; no matter what course of action the cadet took, they could not 'win' – i.e. they could not rescue the crew of the *Kobayashi Maru* and leave the Neutral Zone without being attacked. There are times in every Starfleet officer's life when they face such situations, and it was important to know that they would not crack under the pressure.



The Starfleet ship had to make the decision to enter the Neutral Zone (indicated by the green grid lines), or else deny the stricken vessel any help.

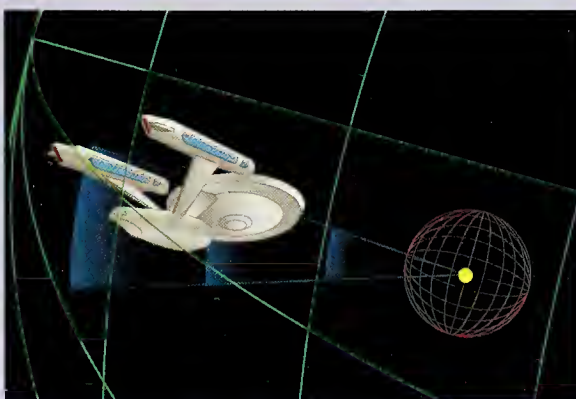
The crew of the *Kobayashi Maru* were out of transporter range (indicated by the red grid lines), and so could not simply be beamed off their damaged ship.

Bonus Briefing



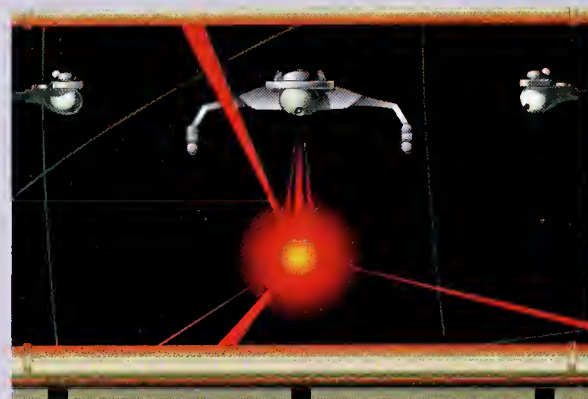
Avoidance

The cadet in command could decide not to violate the Neutral Zone, but this would almost certainly spell doom for the *Kobayashi Maru*.



Rescue

If the decision was taken to mount a rescue, the Starfleet ship had to enter the Neutral Zone, which would be seen as an act of war.



Under fire

The cadets found that their rescue mission led them into the path of several hostile ships who were intent on destroying them.

the attacking vessels to explain that they were on a mission of mercy. But the message would be met with silence, and the captain would be forced to make a last-ditch effort to evade the attackers and find a way out of the Neutral Zone. Unfortunately, they would find themselves effectively outmaneuvered and outgunned by their assailants, and they would be hit with a full barrage of phaser fire and torpedoes.

The replica of the bridge sustained whatever damage reflected the hits the enemy vessels made on the computer simulation. The shocked cadets were left assessing casualties and damage. When the simulation finally came to an end, the evaluation committee, who had been monitoring the cadets, entered the bridge, and the trainees were directed to a debriefing room to ask questions.

Coping under stress

In some ways the *Kobayashi Maru* scenario was an unfair test, because the computer was programmed to present a no-win situation to the cadets. However, the point of the exercise was to discover how they would deal with the death and destruction they would almost inevitably face during their Starfleet careers. It was essentially a test of character. Guilt, fear, and anger were emotions that often came

up after undergoing the *Kobayashi Maru* scenario, but the best cadets would exhaust every possibility of hope before surrendering to their fate.

Kirk's solution

James T. Kirk was the only cadet to successfully defeat the *Kobayashi Maru* scenario. Before his third attempt he reprogrammed the computer simulation to make it possible to rescue the damaged freighter and get out of the Neutral Zone safely; later he said that he simply "didn't believe in the no-win scenario." He subsequently received a commendation for original thinking.



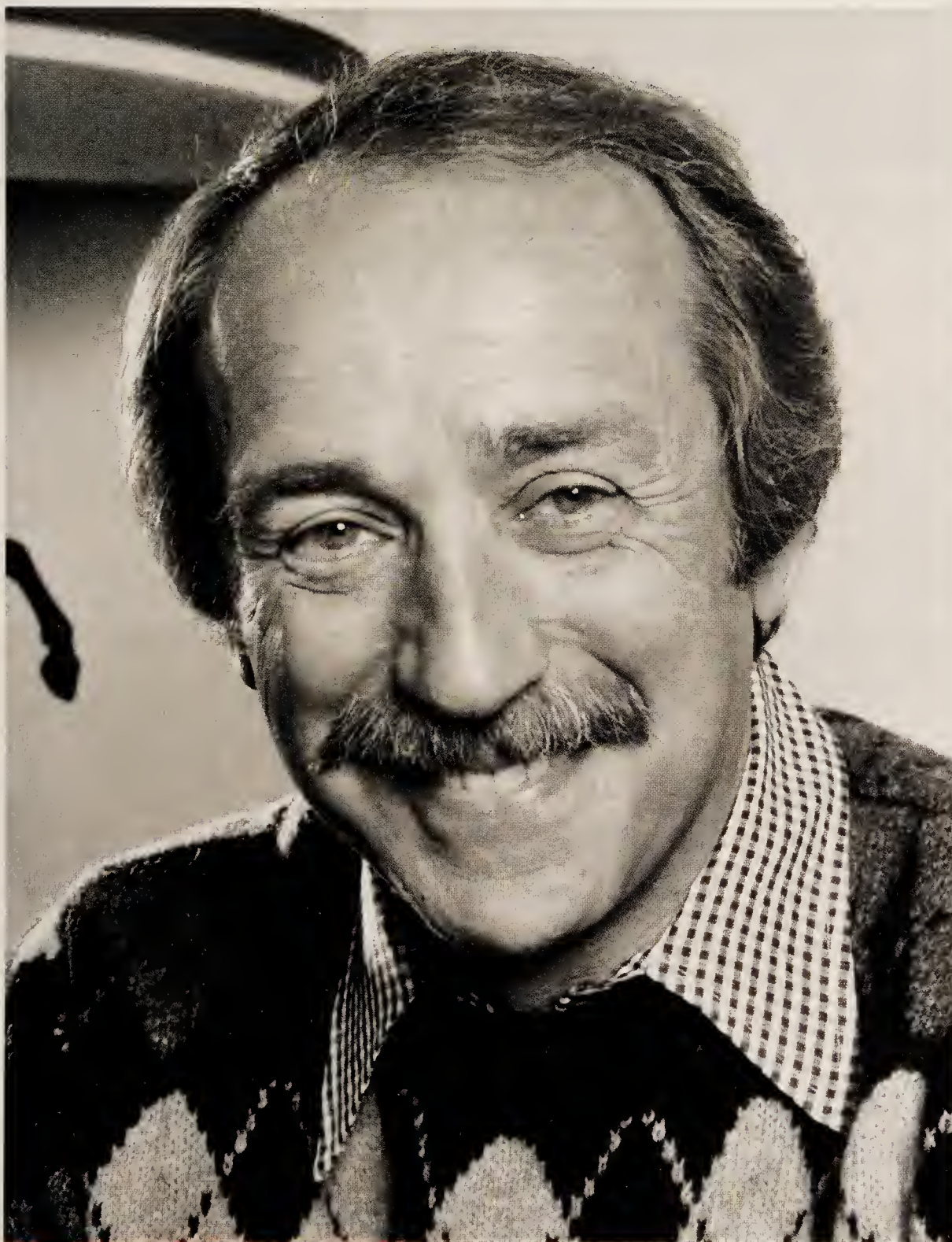
Although there was no danger of anyone being hurt, the training bridge was designed so that it could reflect real damage in order to see how the cadets reacted when faced with a dire situation.

Admiral Kirk, the only person ever to beat the *KOBAYASHI MARU* scenario, oversaw Saavik's attempt at it in 2285.



Robert Sallin

***STAR TREK II*'s producer Robert Sallin was a director with hundreds of television commercials to his name. Experience had taught him what it took to get visual effects on screen and how important it was to have a happy crew.**

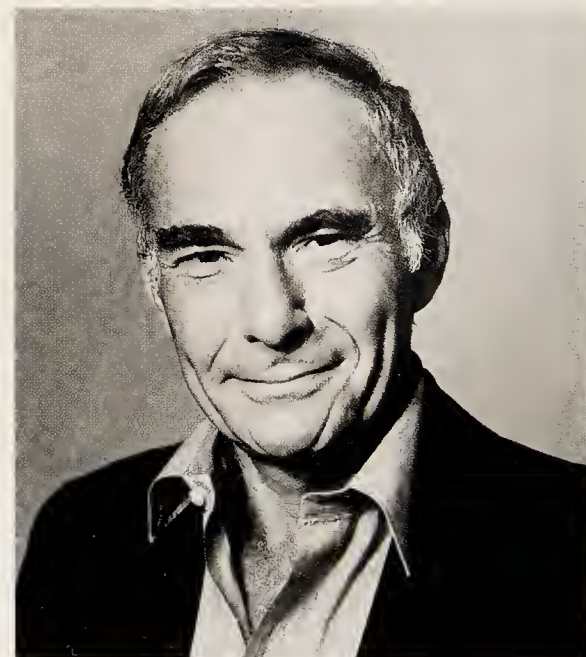


As the producer of *STAR TREK II*, Robert Sallin was responsible for recruiting the crew, operating as a backup for director Nicholas Meyer, and supervising the visual effects.

There were two producers on *STAR TREK: THE WRATH OF KHAN*; executive producer Harve Bennett, who had overall responsibility for the project, and producer Robert Sallin, who ran the production on a daily basis. As Bob says, it can be difficult to explain exactly what a producer does, not least because it can vary from movie to movie. In this case, he reported to Harve, who was responsible for several different projects. "He had three projects to do; one was 'A Woman Called Golda,' one was a television series called 'The Powers of Matthew Star,' and the third was *STAR TREK*. I always let him know what was going on, but in terms of planning the production, who I used on the crew, the look of the movie, that was all me."

Contented team

Bob's first task was to recruit the team who would make the picture. To his mind, putting a crew together isn't just a question of finding talented people; it's equally important to use people with the right attitude. He remembers



Bob worked with Harve Bennett, who had overall responsibility for the movie, along with several other projects.



Bob says that he was “in the room” when the decision was taken to kill Spock, though he was amazed to receive a death threat when the news leaked out.

that he even wrote Harve a memo on the subject. “I’m a great believer in having a happy crew, because this is a very painful business. I said, ‘You know, I don’t want to recruit people for this picture who are just on board for their paycheck; I want people who are really going to participate in this total experience. I don’t want it to take the place of their wife or children, but I want an emotional commitment that this is going to make a terrific picture, and it’s going to be a great experience getting there.’ I think that is vital – it always benefits both the

production and the management. It’s about, ‘What kind of human being am I going to deal with here?’”

Efficient crew

He goes on to say that at the time Hollywood was very concerned about escalating costs after several films, including *STAR TREK: THE MOTION PICTURE*, had come in dramatically over budget. Paramount Pictures responded by suggesting that most of Bob’s crew should have a television background. “Theoretically, television people knew

how to do things quicker and faster and more efficiently,” he says. “And, candidly, good crew people work across the board. I had some very good people and, yes, they were used to moving a little more quickly than they do in features. My cinematographer, Gayne Rescher, had shot a wonderful movie-of-the-week for television; it was just a beautiful piece of work. In terms of set design and so on I worked with Joe Jennings and Mike Minor, who were both very good. The costume designer, Bob Fletcher, was a wonderful man.”

Dangerous story

The script was one area of the production that was left mostly to Harve, who worked intensively with a number of writers. Bob sat in on many of the meetings and contributed his notes, and he remembers that, when the fans didn’t like the rumors they heard, he was in the firing line alongside Harve: sometimes, it seemed, literally. “When the word leaked out that we were planning to kill Spock, I got a message on my answering machine, that said, ‘If you kill Spock, we’re going to kill you!’ I actually had a death threat! I was stunned. I’ve served in two branches of our military, the Marines and the Air Force, and I’ve never had anyone really say they were going to kill me! We were very concerned, and had to have security around our homes, because I had two young children.”

Despite their concerns, the producers never backed down on their plans for Spock, but the script did continue to evolve in other



Bob claims credit for turning the script’s ‘wee beasties’ into sluglike creatures. He remembers that he got the idea when he found a slug on his doorstep.



Bob wanted to make the final battle between the ENTERPRISE and the RELIANT more dramatic, and he worked with art director Michael Minor to develop the idea for the nebula.



Saving money was an essential part of Bob's job, and he was able to identify various pieces of footage from the first film, which he and director Nicholas Meyer could reuse. The *ENTERPRISE* departure relied entirely on reused shots.

ways. Beyond a general desire to see *STAR TREK* "go someplace it hadn't before," Bob doesn't remember many of the specifics of his notes, but he can point to one major contribution he made to the story. The idea that Khan would use alien creatures to mind-control Chekov and Terrell was introduced early on, but the first time they appeared they were described as spiderlike creatures that nestled between their victim's shoulder-blades.

Disgusting contribution

"I said, 'Wait a minute, guys, that's 'Operation - Annihilate!' That's straight out of the television show; everybody's seen that. There's no drama in that.' They kind of looked at me and said, 'Well, great then. You go figure it out.' So the next day I woke up and went out to get my morning paper, and there on my walkway was a slug. I looked at it and I thought, 'Perfect. I hate these things. Everybody hates these things. What if ...' I called our technical adviser over at Caltech and said, 'Would it be feasible for a tiny little thing like a slug to get into the ear and go down into the cerebral cortex and then grow?' He said, 'Oh, sure! There's a thing called an earwig, and they do that down in the South.'"

Harve embraced the idea and named Bob's slugs 'Ceti eels.' Although many other things were changed, they survived to the finished movie, when Bob remembers seeing them with an audience for the first time. "The great payoff for me was when this thing came on the screen and women, and even some men, turned away, going, 'Ohhhhh.' One woman said, 'Oh, that's the

grossest thing I've ever seen!' And that was exactly what I wanted!"

Preparing the way

Because the script was being developed before a director was in place, Bob took charge of the preparations for the shoot. "We were a little bit ahead of ourselves there," he says, "but I had to do it. I'd directed about 2,000 television commercials, and I owned my own production company, so I just attacked it like a large commercial.

"I looked at the previous wardrobe - thank goodness for Bob Fletcher - and said, 'These look like Dr. Denton's jumpsuits. They really don't have any style.' I wanted to redesign them, but I didn't want to throw away everything, because that's too costly, so I said, 'Let's

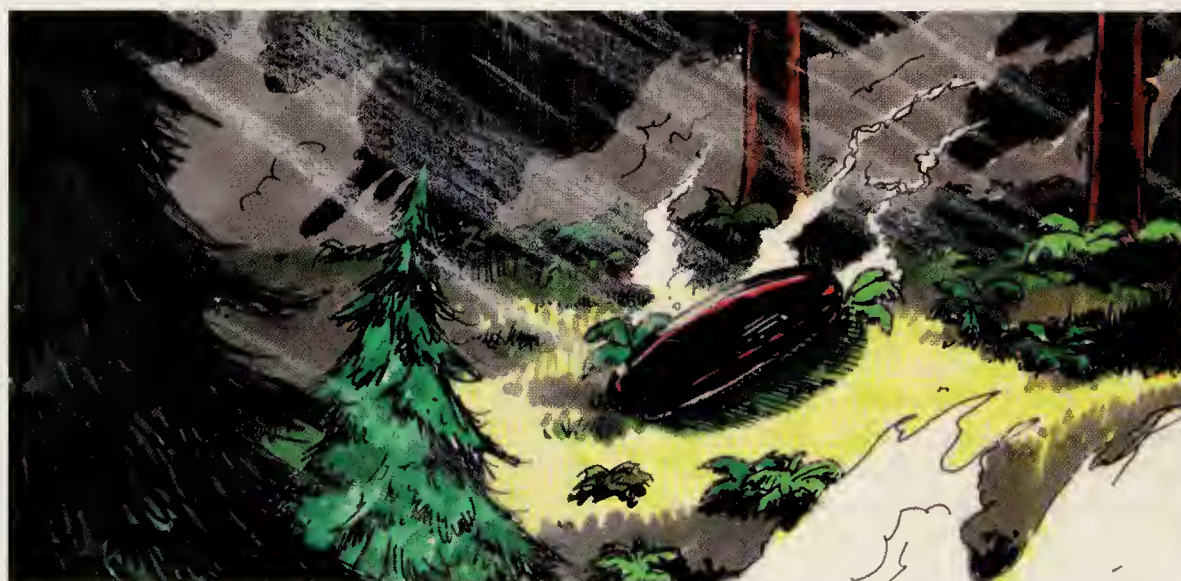
do some dye tests.' To this day I have the swatches of the different-colored uniforms that we tested to see if we could reuse some of the old material and rework it.

"We knew that we were going to use certain sets. I had even started on the design of the visual effects. Harve already had the idea to bring Ricardo Montalban back, so we started working with that and the inevitable conflict between him and Kirk, and the battle that would have to take place in space. I had [art director] Mike Minor draw up my storyboards for me. He and I would sit at my conference table; I'd say, 'Mike, draw this, where the ship crosses over this way,' and then he would say, 'You know, it might be neater if it came around 180 degrees in the other direction.' And I'd say, 'Oh, that's a great idea.' So we collaborated. He had valuable input, and was just terrific to work with."

Into the nebula

One of the things that came out of Bob's discussions with Mike and the production designer Joe Jennings was the idea that the final battle should take place in a brightly-colored nebula. Bob was concerned that because the *Enterprise* and the *Reliant* were not highly maneuverable the final battle could seem awkward. When Mike showed him a book with pictures of a nebula, they thought they had found the answer, and, Bob says, the more he found out about it, the better the idea sounded.

"I talked to my scientific advisor and said, 'What happens in a nebula?' and he said, 'All your instrumentation goes wacky because of the intense magnetic field,' and so on and so forth. I thought, 'Yeah, that's



Bob worked with Mike Minor to produce storyboards and sketches that could be shown to ILM, who then produced modified versions showing exactly what they could provide. The process continued to the end, when the shot of Spock's coffin was added.



Bob insisted that Admiral Kirk's first appearance was as dramatic as possible. He wanted a shot when Kirk was silhouetted by the light behind him, and when the first version wasn't powerful enough, he made sure that it was reshot.

cool, because it means they're both disabled, and they're like two blind rhinoceros trying to find each other; plus the background will be so visually astonishing."

Bob would also be responsible for getting the nebula and all the other visual effects on screen. Because commercials are often on the cutting edge of technology, he had considerable experience of working with VFX, and he says that he was determined to get the best people he could without blowing the budget. "Originally, I was going to portion the work out to different houses. But in my heart of hearts I really wanted to go to ILM, because it put everything under one roof. As time went on and the schedule became compressed I knew that we were going to be in serious trouble. We could still have got the stuff, but I just felt that it was inefficient and it would cost us more money in the long run, so I pushed very hard for that and we did give the work to ILM."

Finding Nicholas Meyer

While all this work was going on, Bob was devoting considerable effort to finding a director for the movie, which to his amazement, turned out to be a difficult process. "I started looking at the directors I admired: people who were just first-class directors. The bottom line was that no one wanted to do a sequel, no one wanted to do science fiction, and no one wanted to do *STAR TREK*. I couldn't believe it. I had a list of about 40 or 50 directors that I had gone through and talked with people about, and I couldn't get any interest. It was then that my secretary suggested Nick Meyer.

"I was aware of his work as a screenwriter, and in fact he had directed that one film, 'Time After Time,' which I thought

was a very interesting piece of work. Also, I thought *STAR TREK* was a space opera, and I saw that kind of vision in Nick's work. I interviewed him and then brought Harve into it, and told him, 'I think this is the guy.'"

Harve was soon convinced that Nick was the answer to their problems, and, after Nick performed an admired rewrite on the script, the movie was finally ready to go into production.

On hand

Bob or his associate producer, Bill Phillips, was on stage for every day of the shoot. Bob explains that his function was partially to act as a backup for Nick, who was, after all, directing only his second movie, but also to offer the kind of advice that can only be given after years of experience.

"Nick's a wonderful storyteller, and I surrounded him with what I thought were some really wonderful people. But, bottom line, there were always little contributions that

I made to kind of make sure there were no problems. There's a lot of pressure on a guy directing his first big picture.

"I'll give you an example. This occurred at the opening of the picture when we discover that it's a training exercise: the doors open, and Kirk appears. I said, 'Look, guys; we're introducing Captain Kirk. I think we need a little drama here. So here's what I want to do. When those doors open, the room is filled with smoke, and I want him to emerge in silhouette. I want the strongest backlight you can give him, directly behind him, so that when he walks through there are fingers of light that surround him in the smoke. I want it to look like the Second Coming.' They said, 'Oh, that's a great idea.' I had to go up to ILM the day they shot. When I came back and looked at the dailies, the light was off to the side and the shot had no drama whatsoever. I made them go back and reshoot it, and that's the shot that's in the picture."

Saving money

In other cases, Bob was able to make sure that Nick was able to get the shots that he wanted. During Spock's funeral, Nick wanted the camera to be directly in front of the torpedo that acted as a coffin and to move with it as it slid into the launcher.

"I got a call from the head of production at Paramount: 'Nick wants this, and we're going to have to rip out the floor, and we're going to have to rebuild the set so it's high enough off the ground to get the camera in. We've got to talk to Nick.'

"We all went down there, and everyone was gathered around looking at this trough. I just turned to the key grip and said, 'Do you have a Western dolly?' That's basically a trolley that you use to pull the camera. He said 'Yes,' and I said, 'Have you that tubular track for it? And



Bob found a way of giving Nick Meyer this shot of a torpedo without having to rebuild the set. What he did was put tracks that are used to dolly (move) the camera in the trench so the camera was on the same level as the torpedo and could move with it.

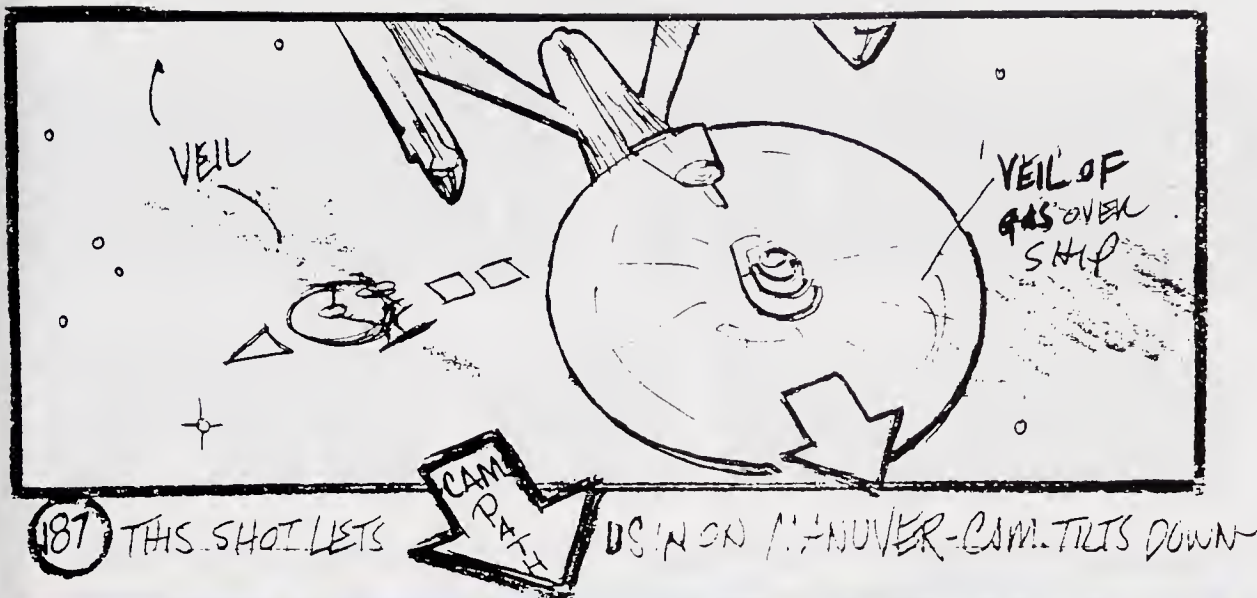
you look at some of the original stuff I did, like the one ship passing over the other ship and they don't know that each is there, that remained in concept, but the execution of it was slightly different. ILM were always tweaking things and trying to come up with ways to make it look better, but Mike's boards were pretty tight. As a matter of fact, that's one of the reasons we came in on budget. If Nick came up with an idea, we'd say, 'Well, gee; now we don't need that shot we had planned before.' So I said, 'I want credit for that shot,' and Mike and I would storyboard a new shot. It's never as finely tuned as you would like it, but it was pretty highly disciplined, I'll tell you."

Unexpected response

Finally, when all the shots were delivered and Nick had edited everything together, the team took their movie and showed it to a test audience. Bob remembers that the results were rapturous, but there was one thing that really caught him by surprise.

"I'll never forget this. As a director, you feel out what you can do with an audience; things that you can put in a film that are going to move them. When we knew that Spock was going to die in the engine room, and we were going to have a funeral, Harve said, 'When they're all standing there, what do you think about having Scotty play the bagpipes, and play 'Amazing Grace'?' I loved that idea. We went through the whole thing, and it was shot that way. We were at the preview screenings in Kansas City, and when Spock died the audience absolutely dissolved in tears. It was very emotional. But when Scotty started playing 'Amazing Grace,' they burst into laughter. I was dumbstruck. I couldn't for the life of me understand what had transpired. Upon reflection I realized that the death of Spock was such a powerful emotional experience for them that when they saw something as unusual as Scotty playing the bagpipes, it was a relief, and they laughed. But we left it in."

That choice, like almost every choice on this movie, was the right one, and the movie has earned itself a great place in *STAR TREK* history. No single person is responsible for a movie's success – if it is anything, filmmaking is the art of collaboration – but there is no question that Bob recruited the team and created the atmosphere that made that success possible. There is also little argument that this movie marked *STAR TREK*'s rebirth; if it had been a failure, there would have been no more sequels, and no more television series. ♡



Bob provided ILM with Mike Minor's storyboards, which showed them exactly what was needed. Inevitably there were some changes, but, as you can see, the storyboards were usually remarkably close to the finished shots.

can you put on the little wheels?' He nodded, and I said, 'Can't we mount the camera on the dolly, put the track down inside the trough, then move the camera with an offset arm [which allows you to control it from above] and do the shot that way?' He said, 'Yeah, we can do that,' and I said, 'What's that going to cost?' and he said, 'About \$30,' and I said, 'Well, I think that's what we're doing, then!'"

VFX supervisor

Nick describes *STAR TREK II* as being "an inside, outside film," meaning that everything he shot took place inside a ship or on a planet, whereas the visual effects almost all took place in outer space. Nick certainly had input to the visual effects sequences, but it was Bob who

conceived them and worked with ILM to make sure that he got exactly what he wanted.

He remembers that he was keen to control costs by using as much material as he could from *STAR TREK: THE MOTION PICTURE*. He storyboarded a new departure sequence that used shots from the extensive *Enterprise* flypast sequence that Doug Trumbull had created, and took a hard look at the models to see what could be reused. "We had things like the space station," he recalls. "I looked at the original one on the film, and I said, 'Well, gee, instead of building a whole new one, why don't we just turn it upside down?'"

However, there were also many new effects sequences that had to be produced at ILM, whether they were using old models or new ones. "I storyboarded as much as I could. If

The Genesis Demo

How CGI changed the world

Pixar is best known as the company behind 'Toy Story' and 'Monsters, Inc,' but, years before they created Woody, Buzz, Mike, and Sulley, they were working for George Lucas and waiting for a chance to show what they could do. The first CG sequence they produced for a major movie was *STAR TREK II*'s Genesis demo.

As difficult as it is to imagine, there was a time before computers; letters were written by hand, sums were worked out on the back of an envelope, and visual effects were all made with physical models. Today, movie effects are dominated by computers – the Yoda who goes into battle is a digital model, and so is the Spider-Man who swings between skyscrapers. In 1981 things were very different; back then there had never been a photorealistic CG sequence in a successful movie, so when Paramount and ILM agreed to create the Genesis demo tape using nothing but computer graphics, they were taking the first step on a road that would transform the world of visual effects.

Waiting for a chance

After the success of 'Star Wars,' ILM's owner, George Lucas, had assembled a team of experts under the leadership of Dr. Alvy Ray Smith to look at ways of using computers in the movies. "We thought he had hired us to do computer graphics because that's what we were really good at," Alvy laughs, "but it was actually to build three machines: a digital video editor, a digital audio synthesizer, and a digital optical printer." While Alvy and his team worked on these projects they waited for Lucas to come knocking on the door and ask them to create some CG shots for one of his movies. When that knock didn't come, Alvy realized that "George didn't know what he had," and began to wonder how he could get his boss's attention.

Fortunately, before long, someone else did knock on the door – Robert Sallin, the producer of *STAR TREK II*. He told ILM that



***STAR TREK II*'s producer, Robert Sallin, and ILM supervisor Jim Veilleux reasoned that since the Genesis demo tape showed a 23rd-century computer simulation it didn't have to be completely realistic, so they could use 20th-century computers.**

he was interested in using computer graphics somewhere in the movie. So, the ILM guys called Alvy and asked him to come next door.

"They had a specific scene they wanted," Alvy remembers. "They called it the Genesis demo. They wanted this effect that instantaneously turned dead matter into living matter and they needed a scene where Kirk was shown how it worked. Their idea was that there would be an aquarium with a rock floating in it and somehow things started to grow on this rock. I said, 'You guys know what you can and can't do with computer graphics?' And they said, 'No.' I said, 'Well, I do, so let me go home overnight and think about this, and I'll come back with a proposal for something we can actually execute.'"

When Alvy left the room he knew he'd just been given the chance he'd been waiting for.

He remembers he spent that night racking his brains and furiously sketching storyboards. "I threw in everything that my guys could do. I'd just been working with Jim Blinn down at JPL, where he'd done the Voyager flyby movies, so I had that in my mind. Loren Carpenter had just joined us; his specialty was fractal mountains, so we put those in. Bill Reeves had just discovered these things called particle systems, so we threw in some particle system fires. Tom Duff knew how to make craters, so we threw in craters, and so forth."

The next morning Alvy handed his storyboards over and, to his absolute amazement, Bob told him to go ahead and start work. The team were ecstatic, and Alvy was determined to make sure they made the most of their opportunity. "I said, 'Look, we've got this great break here. We've got a chance to be

in the movies. We're going to do a 60-second piece that makes sense narratively, and it won't be gratuitous 3D graphics, but what I really want to do here is create a 60-second commercial for George Lucas so that he'll know what he's got.'

Impossible journey

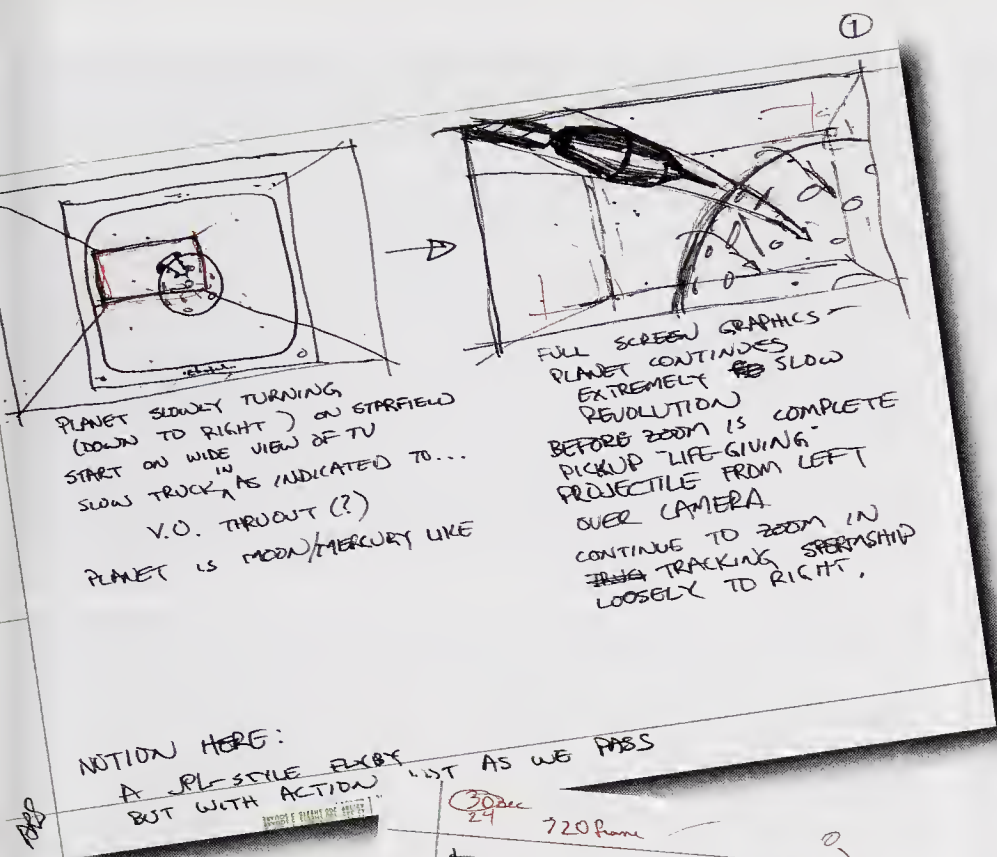
"By that time, I knew that when George watches a movie somehow he will not get sucked in by the emotion the way most of us do. Instead, he watches the cameraman and every decision he makes. So I said, 'OK, we're going to put a camera move in this piece that will be an impossible shot for a real camera. It will be so dazzling it will blow George's socks off.' Most people don't see it because they get

drawn into the sequence, which is, of course, what we want. But George did indeed come in the day after the premiere, put his head in my office, and say, 'Great camera move.' From then on, we were part of his movies."

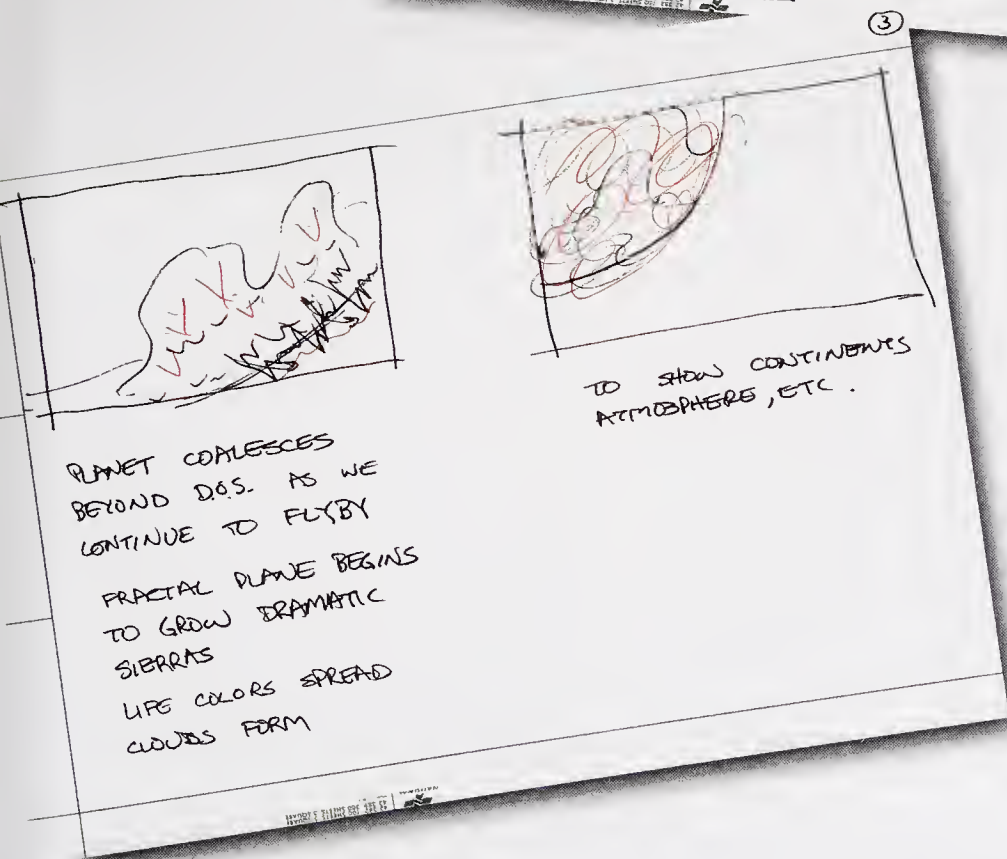
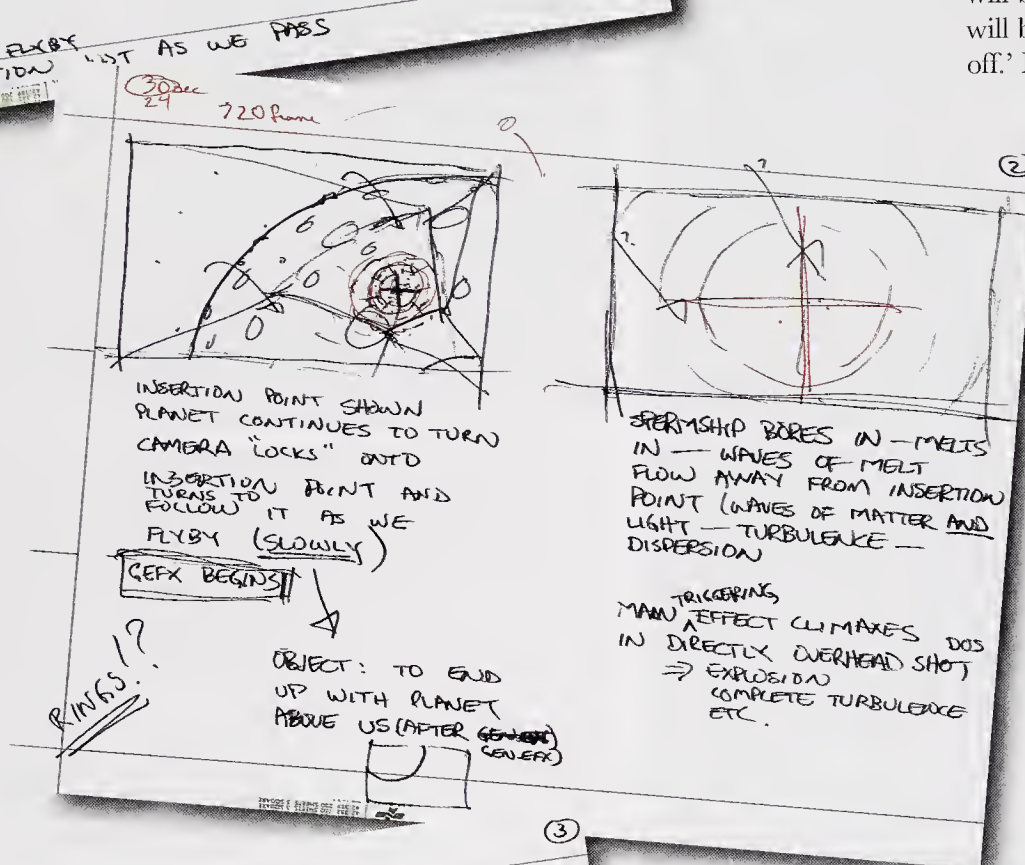
The full Genesis demo actually consisted of three parts, all of which were handled by the computer graphics group. First, Kirk confirms his security clearance with a retina scan. Although this was a 2D effect, it was still created by computer. Four members of Alvy's team had their retinas scanned and Bob Poor's were selected for use because they were the most interesting. The digitized image was divided into tiles, and an animated vein pattern moved around before lining up with part of Kirk's eye, indicating a match.

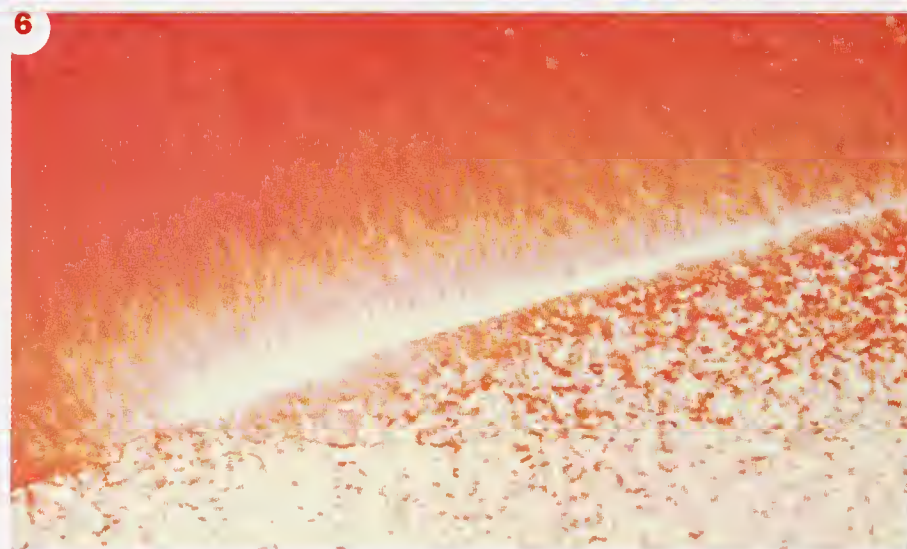
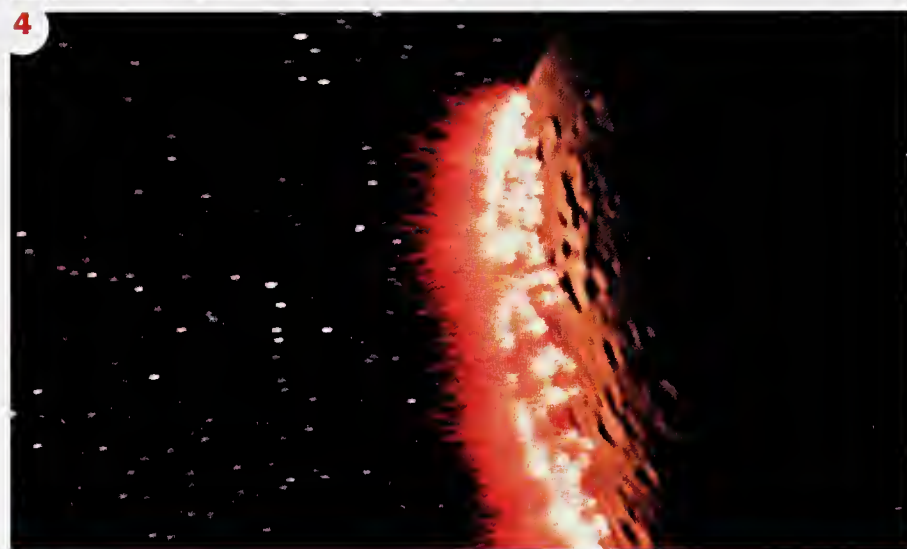
Next, we see a molecular shape, as Carol Marcus explains how it can be reconfigured. Alvy suggested that Bob Langridge at UCSF handle this, since he had already built a model of a suitable molecule.

This left the sequence that showed the Genesis Device transforming a dead planet. It's important to understand that at this point there was no CG software, so Alvy's team had to write it from scratch before they could use it to create their shots. As he explains, "We had techniques, but we had to pull them all together into a polished whole and execute it. An example is the path that the camera flies; we knew how splines worked, and we knew how points of view in 3D space worked, but we had to actually design this very complex shot where the camera flew around the planet, twisted and turned, and spiraled and stayed



Alvy's storyboards were based on techniques he knew his team had mastered, and he was confident they could create the sequence described in the available time.





out ahead of the wall of fire.”

Ed Catmull, who was a vice president of the group, adds that the computers they were working with were nowhere near as powerful as the machines he has at Pixar today. “The current Macintosh is faster than the supercomputer of that day, and we didn’t even have a supercomputer!”

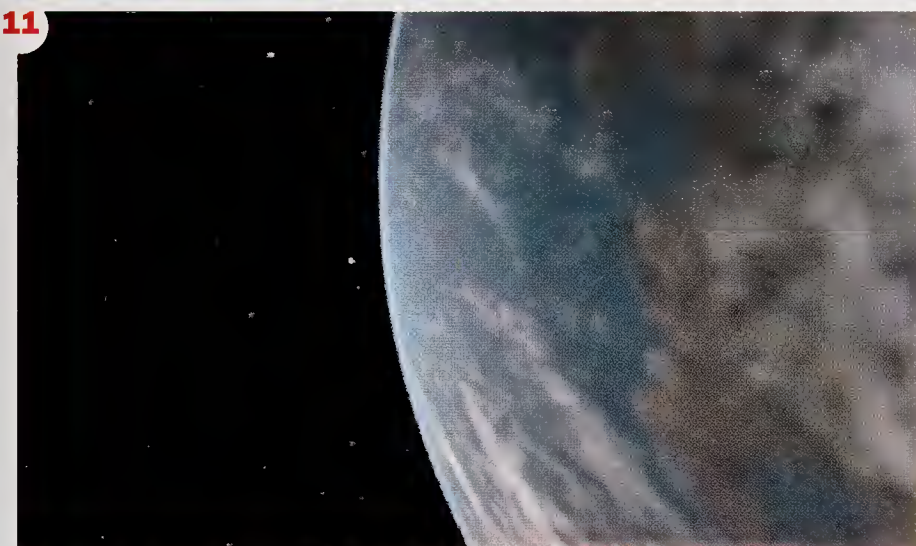
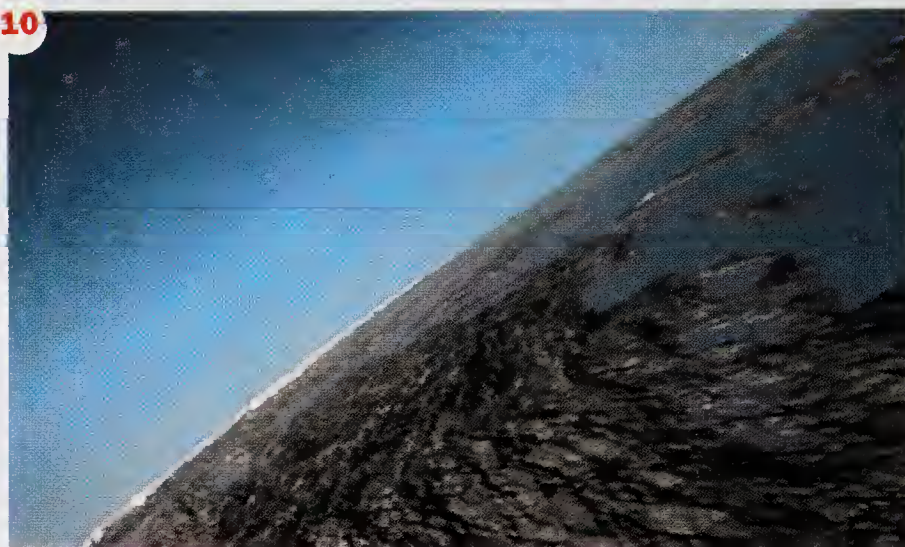
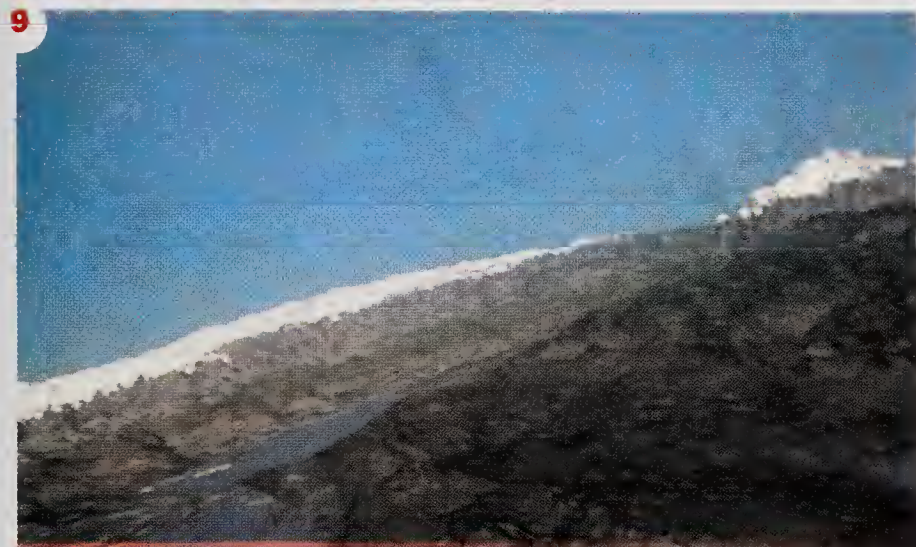
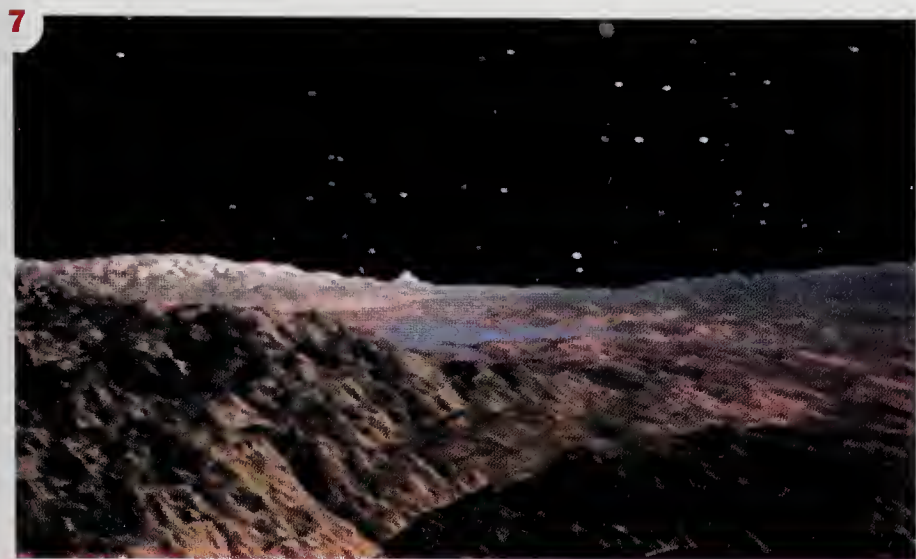
The sequence consists of several different elements, which were worked on by different members of the team. It begins with a shot of the dead planet in a starfield. The planet is a simple sphere, with craters made by a technique known as bump mapping, which was handled by Tom Duff. As Alvy remembers, the stars themselves were rather more compli-

cated than they actually needed to be. “The starfield wasn’t just a random set of dots; it was a real starfield that Loren [Carpenter] had got from Yale. It was an astronomical starbase, with actual correct star placement and star colors. Loren decided to pick out a planet that was in orbit around a real star that might have a planetary system. He spent a long time flying around through this 3D database of stars. What he came up with was a star called Epsilon Indi, where the Big Dipper looks like the Big Dipper, except its got an additional star in its tail, and that star is our sun. We put in all this detail to keep ourselves entertained; nobody in the audience would ever notice, but if you’re spending six months

working on it, you don’t want to be bored.”

We never see the spacecraft, because it is behind the camera, but it now launches the Genesis Device, which strikes the planet, creating a shockwave. Then we cut to the surface of the planet for the flyby sequence. The original idea was that we would see volcanoes erupting as the Genesis wave spread. Tom Porter started work on a routine for this, but before he finished Bill Reeves came up with an alternative approach. He suggested creating a wave of fire that was made up of thousands of particles.

“Particle systems are still in use today,” Alvy says. “But in 1981 it was a simple, powerful, new idea. That sweeps over the planet, and



there are texture changes on the surface, because it's supposed to look like it's melting. Then we cut into the growing fractal mountains. A lot of the impact of that scene comes from the increasing complexity of the way the mountains grow and the color changes that take effect. Then, as we pull away from the planet, which is now Earthlike, there are clouds and an atmosphere that have been added. They were painted by Chris Evans at ILM, using Tom Porter's paint program."

The earliest renders had some problems – there were moire patterns in the craters, some stars disappeared, the fire looked unconvincing, and the fractal mountains didn't always render properly – but these flaws were

all ironed out in time for delivery.

Alvy says that one of the problems they had to cope with has always made him laugh. "There's a spacecraft flying by at about 100,000 miles an hour just above the surface as we're creating these fractal mountains. By the nature of the idea fractal mountains are of random heights, so we don't really know where they are, and sure enough the spacecraft flew through the mountains in one frame: crashed into them. So, we had to go back to that one frame and carve a notch in the mountains so that the spacecraft could get through. In the final shot it flies through this tiny little valley."

Everyone was delighted by the finished

shot, and Alvy has no doubt that it was the key that opened the door to the movies for his team, years before they founded Pixar. "This was our beginning on the big screen. It showed that you could actually use computer graphics in a real production that makes money. In the computer graphics community it was revolutionary, we were heroes of the first order."

Ed goes on to say that they had taken one of the first steps on a path that would revolutionize the movies. "We didn't know where it would lead; we just wanted to have a major impact. I always knew that computer graphics were going to be big, but it's gone beyond what we even dared dream at the time." 🐱

Walter Koenig

"I knew full well that Khan didn't remember me, because we had never met; I hadn't been on the show in the first year!"

"This was going to be a great adventure"

Walter Koenig couldn't have been happier when he learned that Chekov would be taking center stage in *STAR TREK II: THE WRATH OF KHAN*; he even enjoyed working in a sandstorm and being attacked by a repulsive Ceti eel.



After he saw *STAR TREK: THE MOTION PICTURE*, Walter Koenig was convinced that there would never be another *STAR TREK* movie. He was so sure of it that he bet associate producer Jon Povill \$50 the cast would never walk on to the bridge again. "I don't do things halfway," he explains. "If I'm disappointed, I'm enormously disappointed." For the next few months Walter carried on with his life, blissfully unaware that, despite its artistic flaws, the movie was doing incredible business at the box office, so he was very surprised when he learned that the studio had started work on *STAR TREK II*.

Back in action

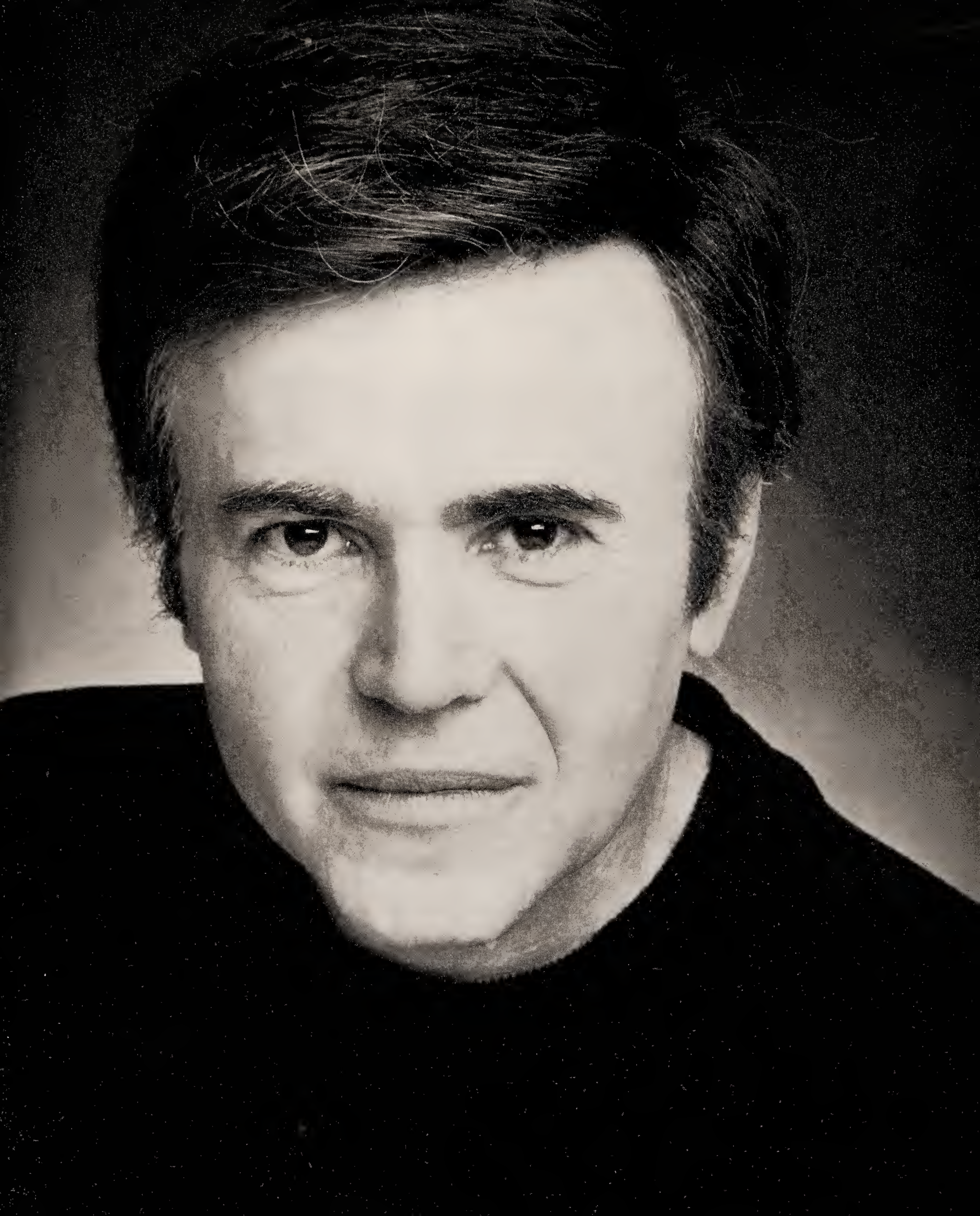
Months before filming began, Walter actually saw one of the early versions of the script. He remembers that he was absolutely delighted that Chekov was being given such a prominent role, but there was something else about the script that had him worried. "I called Harve Bennett before I'd ever met him and told him that there were some serious problems with the script. Initially he didn't want to speak to me, because he thought it was just an actor calling to complain about his role, but when I told him they were structural problems he had me in. The

most egregious problem was that in this script Spock died about a third of the way into the movie. I sat down with Harve and [producer] Robert Sallin, who's a very nice man, and I said, 'I'm sure that you've heard this before, but you can't have Spock dying in the second act; he's integral to the whole plot, he is synonymous with *STAR TREK*, and that has to be the climax of your film.' Harve said that actually he hadn't heard that, but I'm sure that I was just the first of many who brought it to his attention."

Valued input

It's not surprising that Walter looked at the script from a structural point of view – in addition to being an actor, he is an established writer who has sold several screenplays and has credits on a variety of television shows. Harve obviously valued his input, because when Nicholas Meyer turned in his version of the screenplay he sent it over to Walter and asked him to do what he called "a Trekkie run," to look for any inconsistencies that the fans might object to.

Walter thought the new version of the script was an enormous improvement, and his notes mostly involved making minor corrections to the dialogue; for instance he pointed out that it was the "Klingon Neutral Zone," not the "Klingon Neutrality Zone." In fact,





During the making of the movie, Walter Koenig had to deal with some of the most physically uncomfortable moments in his working life; the environment suits had no ventilation, and the harness Khan used to lift him cut into his groin.

the script was remarkably free of serious 'Trek' errors. However, he says, there was one thing that threw him into an absolute quandary. "Of course, the thing I saw was that Khan's character says, 'Ah, yes, Mr. Chekov, I remember you.' I knew full well that Khan didn't remember me, because we had never met; I hadn't been on the show in the first year! So there I was, faced with the very considerable professional conflict as to whether I'd bring this to their attention and save the integrity of the story, or save my part in the film by not saying anything. And in true actor fashion I decided on personal survival, and did not mention that Khan wouldn't know Chekov."

Moment of artistry

Walter could also see that this new version of the script had more than addressed his concerns about how to handle Spock's death, which, as he had suggested, had now been moved to its proper place at the end of the film. "I certainly think that the death of Spock ranks with the most touching, effective, profound moments of any of the *STAR TREK* stories that we've ever done, including the television episodes. It was so brilliantly performed and so brilliantly directed and written. It is the highlight, to me, of the artistry of *STAR TREK*."

One thing Walter didn't do was suggest any significant changes in Chekov's dialogue. There is only a single note, which suggests that Chekov might joke that Ceti Alpha V was invented by a "little old lady in Siberia." "I wouldn't presume, really, to offer too many suggestions," he explains. "I had been conditioned to think of myself as a secondary character with not a very loud voice offscreen, so it never occurred to me to really press for any advantage in the dialogue; and, more importantly, Nick Meyer is a wonderful writer."

Walter is quick to point out that Nick was very open to suggestions, both as a writer and as a director. "He explained early on that he believed that Bill and Leonard certainly knew more about *STAR TREK* than he could ever know, and as a consequence he would defer to them. He is a terrific man and very cultured. There's going to be a screening of *STAR TREK II* in Hollywood and I agreed to join the panel simply for the opportunity to see him again."

Some actors might have been concerned that Chekov spent most of the movie 'working' for Khan and was basically a villain, but this didn't worry Walter. "He was under the psychological influence of bad people," he says dismissively. "It wasn't by his own volition. In any case, it would have been challenging to me. I loved the idea that there was more to play than simply pushing buttons; I was thrilled by that."

Walter was also excited that most of his scenes would be with Ricardo Montalban and Paul Winfield, so both Walter Koenig and Pavel Chekov finally had the chance to get out of Captain Kirk's shadow. "I came in late, because they shot stuff on the *Enterprise* bridge-

before we went to the *Reliant*, so I was at least a week after they were. Once we [Chekov and Terrell] were found on that station, then we were with the cast for the rest of the shoot.

Perfect gentleman

"Working with Ricardo Montalban and Paul Winfield was absolutely delightful. They were very professional actors whose egos were very well contained and who stepped aside for the other actors' moments in front of the camera; the whole time that I worked with them I just had a wonderful experience.

"I can wax poetic about Ricardo. He was a very warm, continental gentleman from the first moment. He was always available to suggestion by the director; I never saw any temperament. In fact, the very first day, Nick called us over to his dressing room to discuss a scene we'd just rehearsed, and he suggested to Ricardo that what he was doing was a bit rich. I thought, 'Oh, God, here it comes!' This is a man who had been a movie star and had had a huge and very successful history, but his reaction was, 'Ah, I see what you mean.' It was so delightful to see that. I knew from that moment that this was going to be a great adventure."

Walter remembers getting on equally well with Paul Winfield, with whom he shared almost all of his scenes. "We had one, very minor disagreement," he laughs. "He talked about us as being Mutt and Jeff. Well, certainly the size difference between us would recall those two comic characters, but he got it backwards. I am very knowledgeable about comic-strip literature, and I knew that Jeff was the little guy and Mutt was the big guy, and he insisted that it was the other way around, so we had a bet and I had to bring in the source material to prove it to him! He ended up contributing the money to a charity."

It's just as well that Walter liked the actors he was working with, because in terms of



Walter insists that he actually enjoyed filming the scenes where a slimy Ceti eel crawled across his face.

BIOGRAPHY

Walter Koenig is of Lithuanian descent and was born in Chicago, Illinois, but spent most of his early life in New York. His acting career has spanned more than 40 years and has encompassed numerous roles in theater, TV, and movies, but he is best known for his portrayal of Pavel Chekov in *STAR TREK* and as Alfred Bester in *'Babylon 5.'*

As well as acting, Walter has written for TV, including an episode of *STAR TREK: THE ANIMATED SERIES*, and has created his own comic book, *'Raver.'* Walter lives in the San Fernando Valley, California.



When Chekov was under Khan's control Walter subtly modified his performance by trying not to blink, thus giving the impression that things weren't quite right.

physical discomfort Chekov seemed to have drawn a very short straw. Filming the scenes in the sandstorm was a deeply uncomfortable experience, and, as if this wasn't enough, the script called for the sluglike Ceti eel to crawl across his face. "Actually, I considered it the long straw," Walter smiles. "I think it's great fun to be on the other end of all of this. Usually I'm in a theater squirming as I watch somebody being eviscerated or decapitated or something, and here I got to writhe in agony and have the audience respond to my histrionics."

Uncomfortable work

Despite this positive attitude, he does remember that shooting the scenes on Ceti Alpha V was far from easy. The only way to film a convincing sandstorm is to make one, so the sound stage had to be filled with dust, which was whipped up by enormous fans. Protective clothing was a must, and, of course, Chekov and Terrell were wearing environmental suits. "Being in those spacesuits was very uncomfortable. We had to take them off every 15 or 20 seconds because the helmets had no ventilation, and they constantly steamed up. But there was still some excitement about it because it was just the two of us and the story at that moment was focused on us, which was such a welcome difference from what I was used to."

Then, once Walter and Paul had reached the relative comfort of Khan's quarters, the script said that Khan would lift Chekov off the ground. This involved attaching Walter to a wire harness. "They had straps between my

legs to lift me, and they cut into my groin and made it somewhat uncomfortable," he admits.

This was definitely the most unpleasant moment of the shoot for Walter, although the next scene, where an infant Ceti eel crawled across his face, was probably the most unnerving to watch. This didn't worry Walter, though. "I loved that. Are you kidding me?" he exclaims. "They had it on a very fine filament. They had drilled a hole in the helmet that I was wearing, and then they dropped it through into the helmet. It was gooey, so it adhered to my face, and there was somebody standing above me pulling it up my cheek."

Walter prides himself on his ability to scream, but he says that the day after they had filmed this scene he thought of a slightly different way he could have approached it. "In retrospect, I thought there was another way that I could have done that scene slightly

different. Instead of immediately reacting with a vocal scream, I think it would have been so much more effective if the scream had been silent for a period of seconds and then suddenly burst forth from my lungs in terror. I think that would have been a more interesting choice."

Now that the Ceti eel was in Chekov's head, he was open to suggestion, and it was an easy matter for Khan to make him do his bidding. Walter recalls that he wanted to find a subtle way of showing the change. "I tried not to blink!" he laughs. "I decided that that was the only thing that was going to give it away, because when I was on the screen talking to Carol Marcus I didn't want her to know that my behavior was being modified, and the only indication of that was that I tried very hard not to blink. This is an unblinking Chekov."

Having gone in, the eel had to come out. Walter says that most of this action was actually filmed by ILM at their base in northern California. "I went up to Marin County, to George Lucas's place. They had created a sculpture of my ear, which was larger, and a mold of my ear, which was obviously the same size. They recreated the flooring where I had fallen down on a table. I lay on that and they had somebody underneath, and now instead of drawing up my face they stuffed it into my ear and they pulled it out. For the sculpture with the far larger orifice they used a hand puppet."

And this time, when filming was done, Walter had a very different attitude to *STAR TREK*'s future. "I firmly believed there would be a *STAR TREK III*, because I thought that *STAR TREK II* was so well done and that it couldn't help but captivate the audience." ✎



Khan ordered Chekov to kill Kirk, but he managed to resist.

Khan Noonien Singh

As a product of 20th-century genetic engineering, with enhanced ambition, Khan Noonien Singh attempted to become ruler first of Earth, and then, more than 200 years later, of the Galaxy.

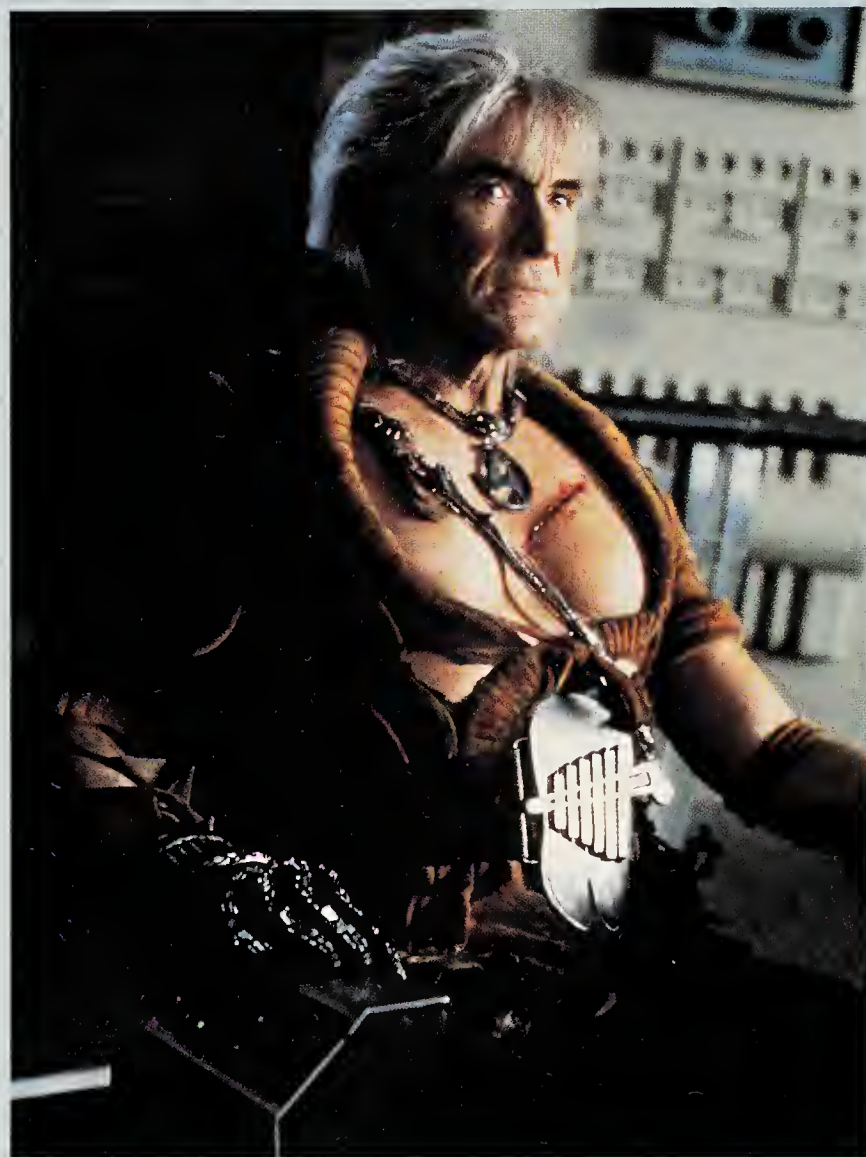
Khan Noonien Singh was one of a group of genetically engineered 'supermen,' born in the early 1960's as the result of an ambitious project by a group of scientists to improve the human race.

The scientists used a selective breeding program to achieve their aims, and in many ways they succeeded; the 'supermen' were mentally and physically superior to ordinary men and women. They were roughly five times stronger than the average person, their lung efficiency was 50 percent greater than normal, and they had an increased capacity for absorbing new information.

What the scientists failed to realize was that creating a superior race also meant creating a superior ambition: the 'supermen' felt that their advanced abilities gave them the right to rule the rest of humanity.

Power hungry

In 1992 a group of 'supermen' seized power simultaneously in more than 40 nations. They were aggressive and arrogant, and Khan was considered the most dangerous and ambitious. At his most powerful, he ruled all of Asia and half of the Middle-East – more than a quarter of the entire planet – but even this was not



Khan blamed Kirk for abandoning his people on a hostile world and not checking on their progress; an ecological disaster after their arrival turned the harsh but hospitable planet of Ceti Alpha V into a wasteland, and resulted in the deaths of 20 of Khan's followers, including his wife.



Khan and his genetically engineered followers were much stronger than the average human, and he was easily able to lift Chekov with just one hand.



Discovered in cryogenic storage aboard the S.S. BOTANY BAY in 2267, Khan was awakened before Kirk and his crew realized who he was.

Frozen in time

When the crew of the *U.S.S. Enterprise* came across the *S.S. Botany Bay* in 2267, Captain Kirk, Dr. McCoy, Scotty, and the ship's historian, Marla McGivers, beamed over for a closer look. They discovered 84 bodies cryogenically frozen in specially designed compartments, although 12 of these units had malfunctioned, leaving 72 people still alive, 30 of whom were women.

Marla McGivers surmised that Khan was probably a Sikh from Northern India, while Scotty noted that the others were of various racial origins, including Western, Latin, and Asian.



The *S.S. BOTANY BAY* carried a crew of 84, held in suspended animation. In 271 years, only 12 were killed by malfunctions.

Once Khan had been revived, he insured that the rest of his fellow 'supermen' were awakened.



enough for him. He envisaged ruling the entire world, but so did the other genetically engineered leaders, and they ended up fighting among themselves.

Devastating war

This led to the Eugenics Wars, during which whole populations were bombed out of existence and the entire planet was threatened with a new dark age.

Fortunately, by 1996 the tyrants were brought under control by a rebellious population. Most of the 'supermen' died or were sentenced to death, but 84 of them – including Khan – escaped aboard the sleeper ship the *S.S. Botany Bay*. On board the ship, the crew were cryogenically frozen to allow them to remain in suspended animation.

Khan's ship was not discovered

for more than 250 years, when it was found by the *U.S.S. Enterprise NCC-1701*. Captain James T. Kirk was forced to release Khan from his cryogenic chamber when the reanimation sequence malfunctioned and he nearly died.

Quick recovery

Khan was beamed straight to sickbay, where he amazed Dr. McCoy with his recuperative

IMPORTANT DATES

Early 1960's

Khan Noonien Singh is born.

1992-1996

Khan rules more than a quarter of Earth, including half of the Middle East and all of Asia.

1996

The Eugenics Wars begin, and Khan is toppled from power.

1996

Khan is forced to flee Earth, and cryogenically freezes himself aboard the *S.S. Botany Bay*.

2267

The *S.S. Botany Bay* is discovered by the *U.S.S. Enterprise NCC-1701*, and Khan is revived.

2267

Khan and his followers are left on Ceti Alpha V.

Circa 2268

Ceti Alpha VI explodes, leaving Ceti Alpha V a wasteland.

2285

Khan hijacks the *U.S.S. Reliant NCC-1864* before he is killed trying to gain his revenge on Admiral Kirk.



Thanks to his superior genetic makeup, Khan was soon back in perfect health after nearly dying when he was revived from his extended sleep.

Khan wasted no time in sizing up Captain Kirk and plotting to take control of the *ENTERPRISE* so that he could find a new world to rule.

Briefing: Khan Noonien Singh

Charismatic leader

Apart from his intellect, strength, and ambition, one of the attributes that made Khan so powerful and dangerous was his magnetism. He inspired complete loyalty among his followers, and they believed he could lead them to greatness. While it was true that there was little freedom in the area of Earth that he ruled between 1992 and 1996, there were also no massacres or war. Even those who were against him had an admiration for what he had accomplished.

It was this personal magnetism that attracted Marla McGivers to him, and she was so besotted that she helped him briefly gain control of the *Enterprise*. Perhaps even Captain Kirk was influenced by Khan's charisma; this might be why he chose to leave him and his followers on an uninhabited world rather than have them confined to a reorientation center.



Marla McGivers's fascination for Khan soon turned to infatuation. She was immediately attracted to Khan's strong personality, and helped him gain control of the ENTERPRISE.



Khan inspired great loyalty in his followers; they believed he would lead them to greatness.



Captain Kirk regained control of the ENTERPRISE after a fight with Khan in engineering. Despite his superior strength, Khan was knocked out by Kirk when the captain hit him over the head with a metal rod.

powers; upon awakening, Khan grabbed McCoy and put a knife to his throat before demanding to know where he was. As if by reflex, Khan immediately began plotting how to take over the *Enterprise*. Before Kirk worked out exactly who he was, Khan had asked to study the technical manuals on the ship, demanded that the rest of his crew be revived, and used his charm to win over the support of the ship's historian, Marla McGivers.

Khan stated that he was surprised how little improvement there had been in human evolution in the last 200 years; he still considered himself to be superior. He felt that this gave him the right to rule other men, only this time his target was not merely Earth, but the Galaxy.

Seizing control

With the help of Marla and his revived crew, Khan took control of engineering and used the knowledge he had gained from the technical manuals to shut off life support to the bridge. Kirk found that Khan had anticipated every contingency for retaking control of the ship, and the bridge crew faced imminent suffocation.

But Khan still needed help in selecting a planet with a population that would be willing to be led by him. He decided that the best way of getting aid was to put Kirk in the ship's decompression chamber and slowly let out all the

air while forcing his crew to watch.

Fortunately for Kirk, Marla could not stand by and let her captain be killed, and she rescued him. Kirk flooded the ship with neural gas, which neutralized Khan's men, and then he defeated Khan in a fight in engineering.

A new world to conquer

Once Khan and his followers, who now included McGivers, had been rounded up, Captain Kirk faced a dilemma. He felt it would be a waste to confine them to a reorientation center, and declared all charges and specifications against them dropped. Instead, he chose to deposit them on Ceti Alpha V, a rough but habitable Class-M planet.

Kirk had offered Khan a world to conquer, knowing that this would be a challenge great enough to keep him busy for the rest of his life. Spock, however, wondered at the 'seed' Kirk had planted in their Galaxy, and what it would be like in 100 years' time. In fact, it turned out to be far sooner than that before Khan once again crossed Kirk's path.

Just six months after the *Enterprise* left, Ceti Alpha VI – the neighboring planet – exploded, leaving Ceti Alpha V a barren wasteland. Khan endured 17 years of suffering – 20 of his followers died, including Marla McGivers, who had become his wife – before he was discovered, by First Officer Pavel Chekov and



Ceti Alpha V was so inhospitable that Khan had to wear a mask.

Once Khan had gained control of the U.S.S. RELIANT he became obsessed with gaining his revenge on his old enemy, Kirk, and on gaining complete power over the Galaxy.

Captain Clark Terrell of the U.S.S. *Reliant* NCC-1864.

Khan, angry and vengeful that Kirk never checked up on their settlement, implanted a native creature into Chekov and Terrell's ears, rendering them helpless to his suggestions. Khan then took control of the *Reliant*, hell-bent on revenge. His second-in-command Joachim argued that there was no need to take on Kirk as they had a ship and could go where they pleased, but Khan was obsessed with proving his superiority.

Baiting the trap

Once Khan had learned about the Genesis Device, he had Chekov contact its creators to instruct them to hand over the device on Kirk's orders. Khan knew that they would contact Kirk to try and prevent this and that

this would bring his enemy to him to find out what was going on.

When the *Enterprise* reached Regula I, Khan was able to launch a surprise attack, as Kirk was not expecting the *Reliant* to fire on them. The *Enterprise* was crippled, and Khan contacted them so that Kirk would know who his adversary was before he destroyed them. Fortunately, Kirk was able to buy time by promising to beam himself over to Khan's ship with all the information regarding Project Genesis. This gave Kirk the chance to tap into the *Reliant*'s command prefix code and lower its shields before he gave the order to fire.

With both ships badly damaged, they were forced to withdraw to carry out repairs. By the time partial power had been restored on the *Enterprise*, Khan had

managed to get his hands on the Genesis Device, and his ship was also in far better shape than Kirk's. In order to even the odds, Spock recommended that they enter the nearby Mutara Nebula where static discharges would interfere with both ships' shields and sensors.

Evening the odds

On board the *Reliant*, Joachim was reluctant to follow the *Enterprise* into the nebula as he knew it would negate their advantage. However, when Kirk contacted them and issued a personal challenge to Khan, the genetically enhanced madman could not resist the opportunity to prove his superiority and ordered his ship to follow the *Enterprise*.

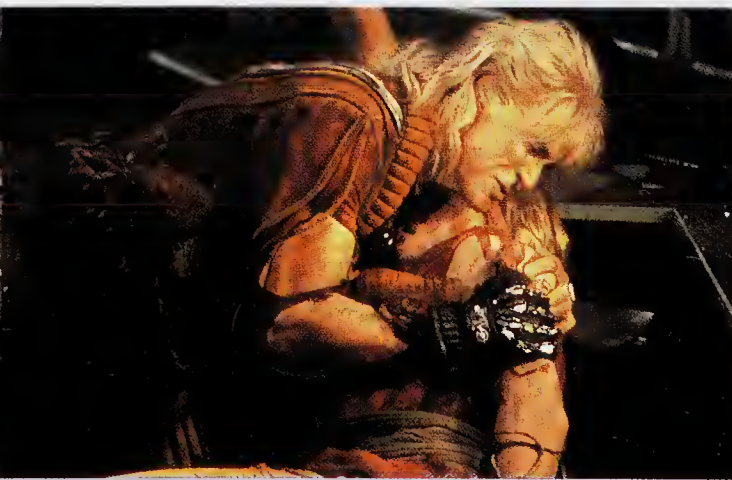
Both ships scored direct hits on one another as they blindly

maneuvered around each other, until Spock noted that Khan's tactics indicated only two-dimensional thinking. Kirk ordered the *Enterprise* to move downward before coming up behind the *Reliant* and firing multiple torpedoes. The *Reliant* was completely disabled and all the crew were killed, except Khan, who refused to accept defeat. He was determined to take Kirk with him, and in a last desperate effort he activated the Genesis Device.

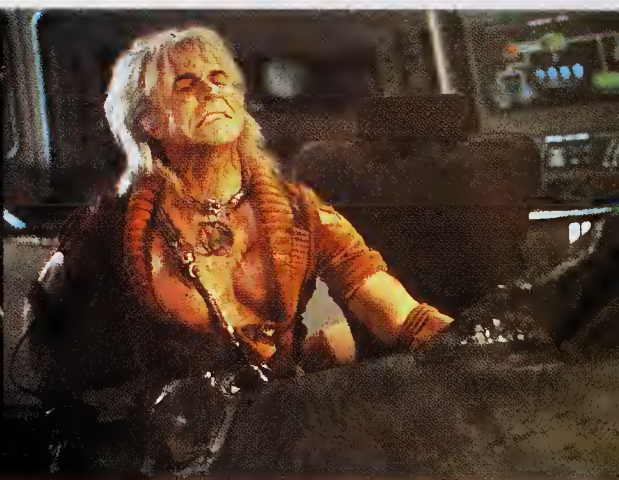
Eloquent and powerful to the very end, Khan reveled in the idea that the Genesis Project would ultimately kill Kirk. He died believing he had achieved his final victory, but Spock sacrificed his life to repair the *Enterprise*'s engines, and Kirk and the rest of his crew were able to escape the detonation of the Genesis Device.



Following a brilliant maneuver and attack by the ENTERPRISE, the bridge of the RELIANT was left strewn with debris and dead bodies.



Khan swore to avenge the death of his second-in-command, Joachim, and refused to give himself up, even though the RELIANT had been completely disabled by the ENTERPRISE.



Khan detonated the Genesis Device in a last desperate effort to kill Kirk, and he died believing he had got his revenge.

Briefing: Khan Noonien Singh

S.S. BOTANY BAY

The S.S. Botany Bay was a sublight ship from the 20th century equipped with cryogenic facilities that Khan and his followers used to place themselves in suspended animation when they fled from Earth.

The DY-100-class S.S. Botany Bay was an Earth ship designed before the advent of warp technology to transport people over long interplanetary distances. Known as a sleeper ship, the Botany Bay incorporated facilities whereby the occupants were placed in suspended animation so they did not age during long journeys. This was important, because it took hundreds of years to reach the nearest inhabitable solar system at sublight speeds.

Nuclear power

As long as the engineering hull of a Constitution-class ship, yet barely half the height of the same hull section, the submarine-like DY-100 class had nuclear-powered engines, which were considered outdated by 2018 after significant improvements in sublight propulsion technology resulted in the DY-500 class.

The inside of the Botany Bay was equipped with 84 bunk bed assemblies to house the sleeping crew members. These chambers were used to cryogenically freeze the passengers so that their

heart rates dropped to four beats per minute and their breathing became almost undetectable. Each crew member was protected behind a window and was clothed with mesh-like material. The crew were kept alive by the ship's internal support systems.

Reviving procedure

Upon reaching the desired destination, the ship's computer would first activate its internal life support systems. Then it would activate the bunk of the crew member who had been designated the leader. If all the systems were secure and there was no threat to life, the leader would revive the rest of the crew.

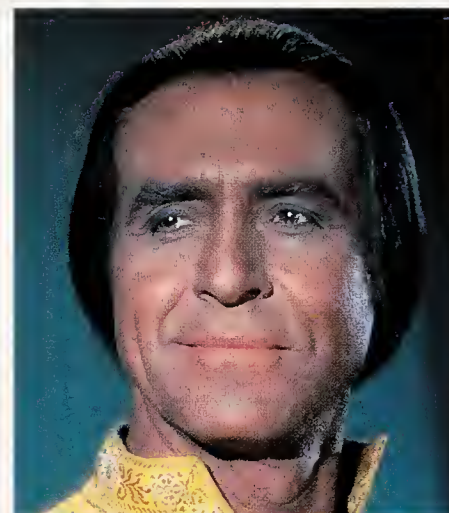
The Botany Bay undertook one of the longest recorded trips using this form of suspended animation when Khan Noonien Singh and his followers used it to flee Earth in 1996. It was found 271 years later when the U.S.S. Enterprise NCC-1701 detected its primitive Morse code distress signal. After being scanned by the Enterprise, the Botany Bay's internal systems

The crew of the ENTERPRISE boarded the sleeper ship, which had drifted far from Earth. They found that the majority of its cryogenically frozen passengers were still alive, even after more than 250 years of travel.



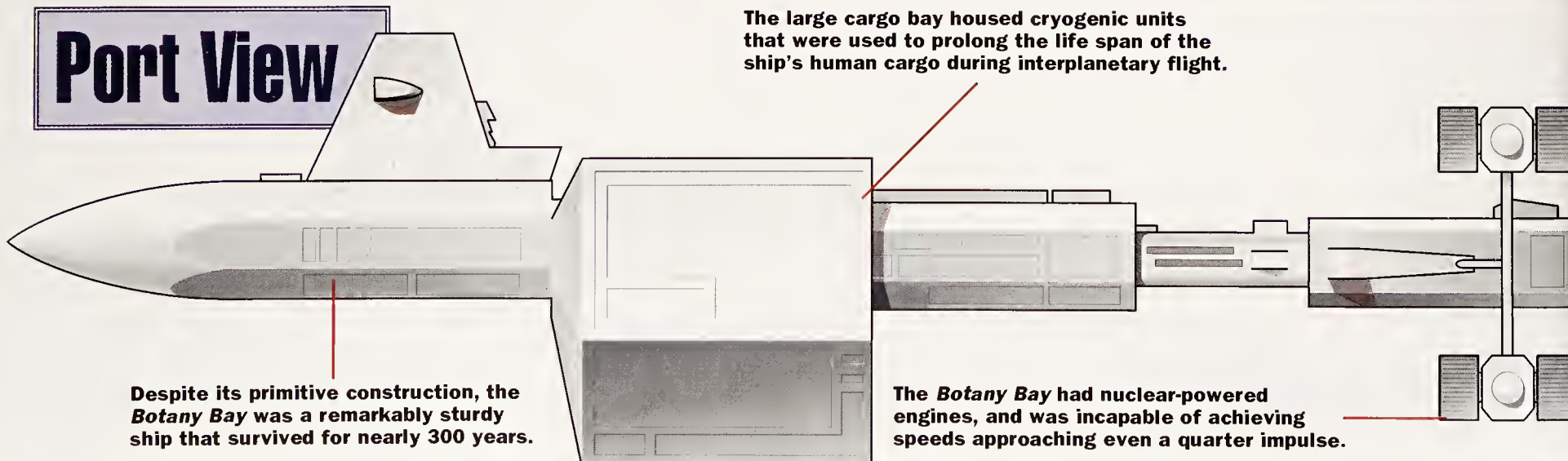
automatically activated heat and oxygen into the environment.

Once on board the Botany Bay, Chief Engineer Scott turned on the ship's lighting system, which also activated a transistor unit on one of the suspended animation bays. Although the circuit failed, the Starfleet personnel were able to break its occupant, Khan Noonien Singh, out of the chamber and save his life. They found that 72 of the Botany Bay's crew were still alive; in more than 250 years of travel there had been only 12 malfunctions resulting in death. But, even with these casualties, the Botany Bay had beaten 10,000 to 1 odds by surviving such a long journey.



Khan and the other 'supermen' were forced to leave Earth after the Eugenics Wars.

Port View



The large cargo bay housed cryogenic units that were used to prolong the life span of the ship's human cargo during interplanetary flight.

Despite its primitive construction, the Botany Bay was a remarkably sturdy ship that survived for nearly 300 years.

The Botany Bay had nuclear-powered engines, and was incapable of achieving speeds approaching even a quarter impulse.



The U.S.S. ENTERPRISE NCC-1701 found the S.S. BOTANY BAY in 2267, drifting in space near the Mutara Nebula.

Marla McGivers

Marla McGivers was a shy historian who fell in love with Khan – a man who seemed to be the embodiment of all her romantic dreams. She abandoned her career to join him in exile, unaware that tragedy lay ahead.



Marla McGivers was so attracted to Khan's forceful character that she helped him take control of the U.S.S. ENTERPRISE and later joined him in exile on Ceti Alpha V.

While serving as the historian aboard the U.S.S. *Enterprise* NCC-1701, Lieutenant Marla McGivers found that she rarely had active duties to perform. On the few occasions when she was called to service, McGivers regarded it almost as an inconvenience, and on one occasion she even kept a landing party waiting for her arrival.

Judging from McGivers' cluttered quarters, crowded with paintings and sculpted busts, her primary pastime was art. Her favorite subjects were all strong,

forceful leaders from Earth's history. McGivers' works of art depicted men such as Napoleon, Richard the Lionheart, Leif Ericsson, and Flavius, a gladiator. McGivers was of the opinion that modern men did not live up to her heroes of the past.

Dream man

As a historian with a fascination for bold, colorful characters McGivers was particularly intrigued when, in 2267, the *Enterprise* discovered the S.S. *Botany Bay* and Khan Noonien Singh, a dictator who had ruled

much of Earth in the 1990's. Though she protested that her interest in Khan was professional, she invited him to her quarters, where she began painting his portrait. She later arranged a full-dress welcome dinner in his honor, a function normally reserved for a Fleet Admiral.

Devotion to Khan

When Khan pursued her, McGivers was surprised and shocked by his bullying manner, but also deeply flattered. Khan demanded absolute loyalty from her and, desperately afraid of losing him, she promised to do anything he asked – including helping him in his attempts to seize the *Enterprise*.

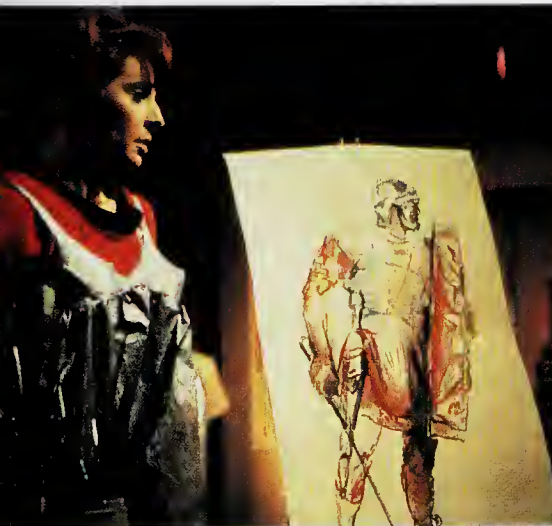
Fortunately, McGivers was uncomfortable with Khan's murderous plans; she turned against him for long enough to prevent Captain Kirk's death and to help retake the ship. But it was too late to save her career.

When Kirk banished Khan and

his followers to Ceti Alpha V, McGivers opted to accompany them rather than face a court-martial. Khan was pleased by her choice and dubbed her "a superior woman."

Planetwide disaster

At the time that Khan's party was exiled to the planet, it was perfectly fit for human habitation. However, a mere six months after their arrival, the neighboring planet, Ceti Alpha VI, exploded, causing an ecological disaster on Ceti Alpha V, which left the planet a barren wasteland. Khan's followers struggled to survive, and the ordeal proved too much for Marla. At some point after their exile, Khan married Marla, but she was killed by a Ceti eel, the planet's only remaining indigenous life form. Khan was left heartbroken by the loss of his "beloved wife," and the seeds of his hatred for Kirk were sown as he swore vengeance on the captain for not checking on their progress.



Marla was fascinated by strong characters from the past, and her quarters were full of works of art depicting powerful men.



Marla not only held Khan in high esteem but was also strongly attracted to him, as was shown when she organized a full-dress dinner to welcome him aboard.



Marla chose to remain by Khan's side and face punishment for her part in helping him to take over the ENTERPRISE.

Ceti Alpha V and the Ceti Eel

When Khan and his followers were exiled to Ceti Alpha V the planet was far from a paradise, but it had the potential to provide a comfortable existence. However, when a neighboring world exploded it became barely habitable.

Situated in the Mutara Sector of the Alpha Quadrant, the Ceti Alpha Star System is home to a handful of planets of varying classifications. When first detected by Starfleet, the fifth planet in the system was a Class-M world, with a broad spectrum of native flora and fauna, albeit in something of a harsh environment. It was described as "a bit savage, somewhat inhospitable, but livable," the kind of frontier planet where only the hardest pioneers might be able to carve themselves a place to live. In the mid-2260's Ceti Alpha V had not yet been considered to be a viable place to forge a Federation colony, but in 2367 Captain Kirk exiled Khan Noonien Singh and his followers to the planet after the genetically engineered 'supermen' tried to take control of the *U.S.S. Enterprise NCC-1701*.

Unknown disaster

For approximately six months, life on Ceti Alpha V was harsh but fruitful for Khan and his people, as they worked to tame the wild planet. But then the sixth planet in the Ceti Alpha system exploded. This caused Ceti Alpha V to move position, until it eventually occupied an orbit similar to that of the missing sixth planet. The stresses of the gravimetric shock-wave resulted in major climactic changes and earthquakes.

Once the planet had stabilized, huge amounts of dust in the

atmosphere caused surface heating, turning the planet into a desert wilderness; high-velocity winds made the air choking and barely breathable, leaving only a limited atmosphere dominated by craylon gas.

Against all the odds

Some of the colonists managed to survive, but the greatest hazard to their existence proved to be not the unrelenting hostility of the environment but the one other surviving species: the Ceti eel. Over the following 17 years, 20 of Khan's people, including his wife, Marla McGivers, were killed by these creatures.

Ceti eels are legless, sand-dwelling invertebrates; adults are approximately 20 centimeters long. The eel appellation is somewhat misleading, as they more closely resemble a nightmarish form of the Earth wood louse. The creatures have armored gray-blue carapaces, which are deeply ridged, and their eyes resemble those of Terran amphibians, with small rectangular pupils and a gray-green iris that is sensitive to changes in light intensity. At the front of the eel's body are two vicious pincers, which the creature primarily uses for defensive purposes. These pincers are quite capable of severing the finger of an unwary human, and the eels' ungainly appearance is belied by their speed.

Formidable as the adults are, it is the young, carried deep in



Khan and his band of renegades were forced to cover themselves from head to foot to survive on Ceti Alpha V after the ecological disaster.



The environment on Ceti Alpha V was completely devastated after the neighboring planet exploded; the surface became covered in sand and dust. A Starfleet survey team struggled to find any signs of life.

Ceti Alpha V and the Ceti Eel



The adult Ceti eels incubate their young in deep crevices along their ridged back. The deadly larvae can be removed from their parents with tweezers.



Ceti eel larvae enter their human victims through the ear canal. They then cause severe brain damage, leading to dementia and eventually death.

the crevices of their parents' armored skin, that are the most dangerous to humans. The larvae resemble leeches at first glance, owing to their darker coloring and mucilaginous coating. When in the vicinity of a human, these larvae enter the human body through the ear canal. Wrapping themselves around the cerebral cortex, they then interfere with cognitive functions in a complex and unique manner.

Agonizing death

Its effect on Khan's people proved calamitous; afflicted individuals suffered periods of delusion, dementia, and eventually a protracted and painful death. Observers of the afflicted,

however, noted other symptoms during the early stages of infestation, which they swiftly learned to turn to their advantage.

A human being carrying a larval Ceti eel becomes extremely open to suggestion. Immediately after the creature's hold is established, the victims lose their willpower, and can find themselves utterly susceptible to the influence of others. This suggestibility, like a post-hypnotic command, is not alleviated by distance or time; subjects have been known to follow orders in a post-hypnotic manner, even when the person controlling them is not present.

Hosts of the eels are not somnambulate zombies, however. They are capable of complex

interactions, and only a slight vagueness about their manner might betray their condition. They appear to retain their ordinary personality and all their previous skills and memories. This is a useful feature, as their knowledge is then at the disposal of their master.

Return to Ceti Alpha V

In 2285, almost two decades after Khan and his people had arrived on Ceti Alpha V, the crew of the *U.S.S. Reliant* NCC-1864 conducted a close-range sensor scan of the planet as part of the top-secret Project Genesis, and they mistakenly believed it to be Ceti Alpha VI.

Khan abducted the *Reliant's*

captain, Clark Terrell, and its first officer Pavel Chekov when they went down to the surface, and he then used the Ceti eel to place them under his control. Despite the fact that Ceti eel infestation was said to inevitably lead to obedience, madness, and death, Terrell and Chekov managed to resist their parasites to an extent.

Both men were acquiescent witnesses to the slaughter of the *Regula I* personnel, but when Terrell was ordered to kill Kirk he turned the phaser on himself. Chekov's resistance to the eels resulted in a seizure, during which the parasite left his brain. After medical treatment, Chekov was able to return to duty with no apparent ill effects.



Chekov became unable to resist Khan's orders after he was infected by the larvae of a Ceti eel, and helped to lure Admiral Kirk into a trap.



Infection by the larvae of a Ceti eel usually proves fatal, but Chekov survived after the parasite left his body and was blasted by a phaser.



Chekov had no lasting effects from being infected by the parasite, and after a checkup by Dr. McCoy he was able to return to duty.

The Art Department

For the second movie, producers Harve Bennett and Robert Sallin recruited an expert art department that had been working on *STAR TREK* for most of the previous five years. Their brief was to make the universe a more dramatic place.

When production designer Joseph Jennings reported for work on the second *STAR TREK* movie, he discovered that the sets for the *U.S.S. Enterprise NCC-1701* were still standing. After director Robert Wise had finished filming the first movie, he'd simply closed the stage doors and moved on. In the intervening months, the interiors of the giant starship had sat patiently, waiting to go back into action.

Another production designer might have been disappointed that he wouldn't get the chance to create the movie's major sets, but this wasn't an issue for Joe, who had actually designed the bridge years earlier, when he was working on the abandoned '*STAR TREK: Phase II*' television series. When that project had become a movie, he'd handed the sets over to his friend Harold Michelson; now Joe was back for the sequel.

Good team

He was joined by art director Michael Minor, who was another veteran of the abandoned TV series, and between them they were responsible for everything that appeared on screen. It's not easy to explain the difference between a production designer and an art director, and Joe says it's hard to define the point where his work ended and Mike's began. "People ask, 'How do you divide up the work?' I guess the answer is that you don't, because you have a group of people who put the visual aspect of the picture together, and, if everything goes really well, by the time it's finished you don't remember what was whose idea to begin with!"

That said, Joe goes on to explain that he and Mike had slightly different skills that complemented one another perfectly. "My mother tongue is the orthographic projection, the drafting; Mike's mother tongue was illustration, so together we could talk to both sides of the spectrum with considerable ease – Mike to the uninitiated who wanted to see



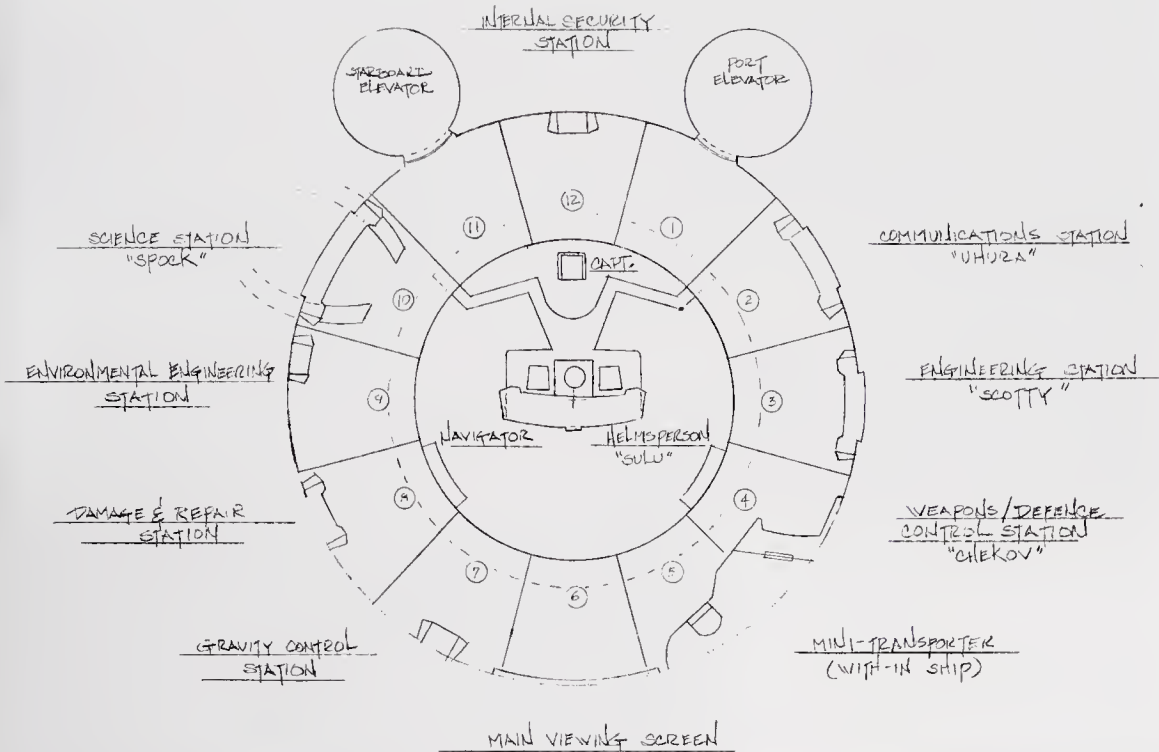
Most of the action in *STAR TREK II: THE WRATH OF KHAN* takes place on the bridge of the *U.S.S. ENTERPRISE NCC-1701*. Physically, the set was much the same as it had been for the first movie, though it was repainted in new colors.

a pretty picture, and me to the guy who had to drive the nails and build the unit. Between the two of us, we came up with the ideas of what it should look like."

Mike died in 1987, and everyone who worked with him says it was a terrible loss. There is no question that he had an enormous impact on the look of the first two *STAR TREK* movies, nor that his influence is still felt today. On *STAR TREK II* he not only worked with Joe, producing concept paintings that showed what the different locations should look like, but he also worked with producer Robert Sallin to produce the storyboards for the visual effects sequences. "Mike was wonderful," Bob says, "and I'm very sorry about his passing. He had a great taste level,

and he was a great complement to Joe."

Most of the action in the film takes place on the bridge of the *Enterprise*. To the untrained eye, this set looks quite different in the second movie, but Joe says the changes were only cosmetic. The layout remained the same, but in order to make the new film warmer than its predecessor the team repainted the set in darker colors. Carol 'Lee' Cole, who was responsible for all the graphics, remembers that they also changed the consoles to make them busier. "Our original designs for *STAR TREK I* were much more detailed and interesting. Then Gene Roddenberry said, 'I want it really plain to try to be futuristic. Cut out all this detail, and simplify things.' We did that, but it got a little too plain, I think. It was kind



Joseph Jennings designed the bridge of the U.S.S. ENTERPRISE NCC-1701 in pie sections that could be pulled out to allow the camera crew to film from any angle.

of beige. This time around, we pulled out a lot of our original drawings and went back to that look for *STAR TREK II*.”

At Bob’s insistence, the film projectors used to put graphics on the screens around the bridge were replaced with specially adapted television monitors that didn’t strobe on screen. Most of the original films were transferred to video so that the majority of the graphics in the movie stayed the same.

Running hot

Sometimes, the advanced nature of the bridge caused a few problems; for instance, there were so many electronics built into the walls that they started to melt the instrument panels, so Joe had to build in a series of fans to keep the whole thing cool. The electronics were necessary because the panels were surprisingly functional. “That bridge had no visual controls whatsoever,” Joe explains. “When everything was off, it was absolutely shiny, blank, black; everything was activated by proximity switches. All the actor had to do was just wiggle his fingers over the top of it and the lights would come on and start doing their winky-blinkies. Well, sometimes they set the proximity switches up too high, and somebody would walk by ’em and the whole panel would turn on!”

Although several other sets were still in place, Joe remembers that the *Enterprise* still gave him plenty of work to do. “A new script will call for different things; somebody walks

down a corridor and goes into another room and, bang, you don’t have that room, so you add it. And it grows, like Topsy, until the stage sort of bulges out.”

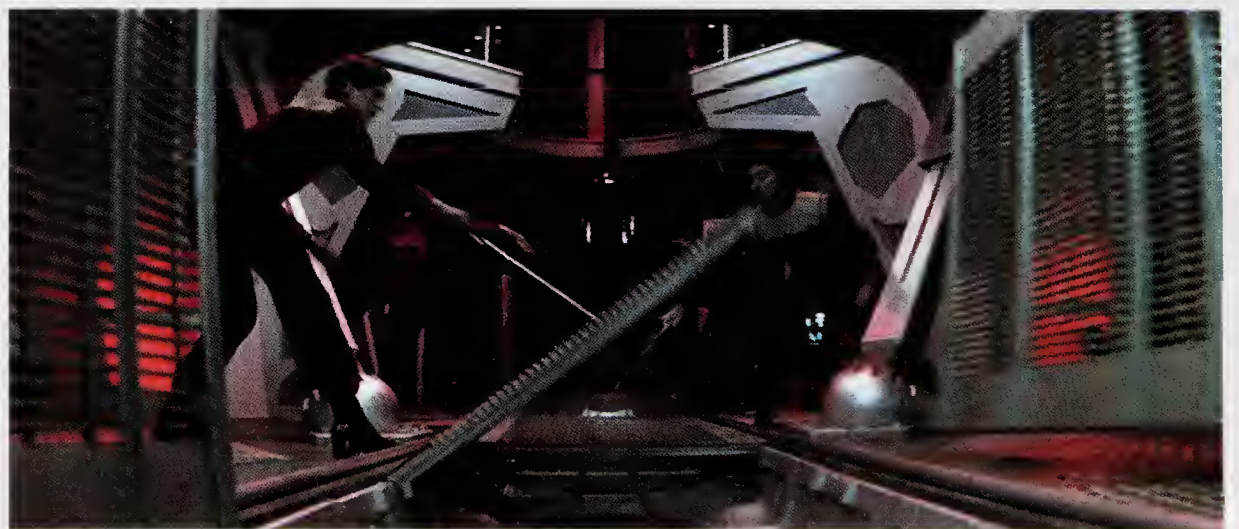
The most obvious new addition was the torpedo room. Few people would realize it, but this was actually a redressed version of the Klingon battle cruiser from the first movie. The new set featured a long channel where the torpedoes were loaded. Director Nicholas Meyer wanted to have as much movement as possible in the action sequences, so he had Joe put grates down over the channel that had to be lifted when the *Enterprise* went into battle.

Exploring the ship

Joe also added a new section in engineering – the reactor room, where Spock sacrificed himself to save the crew – and modified Kirk’s quarters. There was also a brief scene in Spock’s quarters, where the Vulcan was found meditating. “My decorator, Tommy Pedigo, came up with a weird kind of chair that’s supposed to be very good for your posture,”

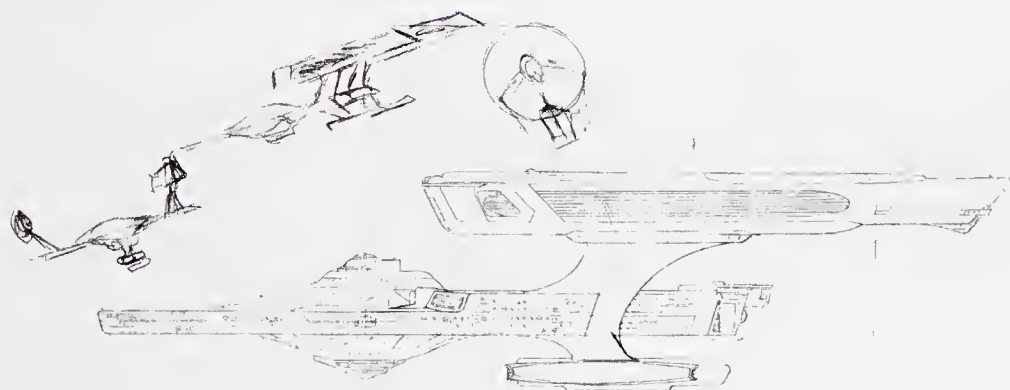


We got a fleeting glimpse of Spock’s quarters, which featured a massive tapestry of the IDIC symbol, which was actually made of hundreds of metal disks.

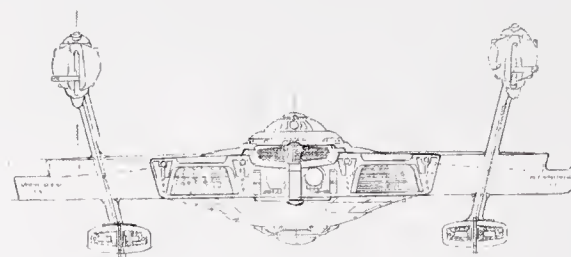


Director Nicholas Meyer insisted on a certain amount of ‘business,’ so the art department built gratings into the floor of the torpedo room that had to be lifted before firing.

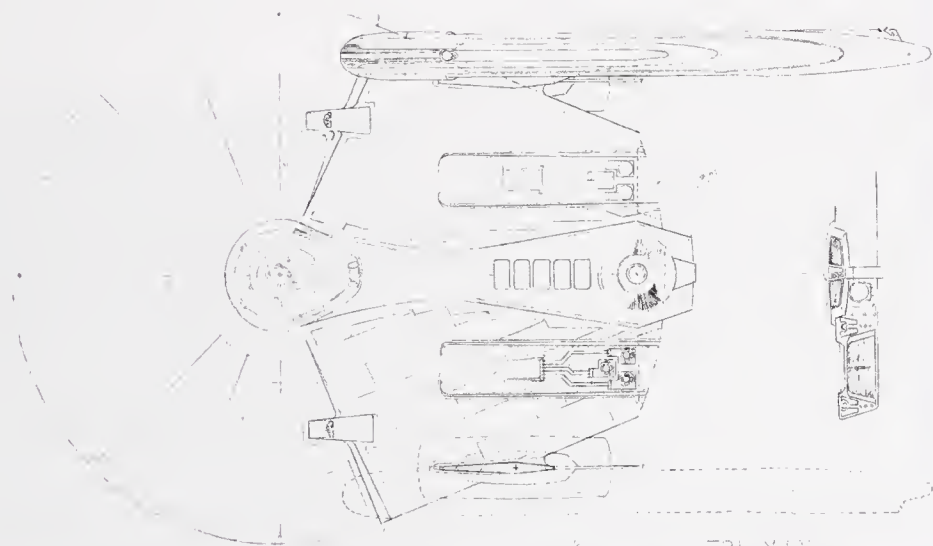
Behind the Scenes



OUTLINE VIEW



REAR VIEW



TOP VIEW

The RELIANT early design

In early versions of the script, the *Reliant* was a *Constitution*-class ship like the *Enterprise*, but this would have made the combat scenes difficult to follow, so the art department was asked to come up with a new ship. Their initial design combined most of the familiar elements of the *Enterprise* but eliminated the engineering hull. When executive producer Harve Bennett approved it, he turned the ship upside down, forcing the art department to rethink the design.

PRELIMINARY SKETCH — U.S.S. RELIANT
NO SCALE



When they made their modifications, the art department kept the nacelles and the saucer the right way up and added a 'roll-bar' unit that was used to support the dropped nacelles. Lee Cole then prepared detailed drawings for ILM to work from.

Behind the Scenes



The bridge of the RELIANT was actually the same set as the ENTERPRISE bridge, though some of the consoles were built up. Also, a ceiling piece was added that allowed Nicholas Meyer to shoot different angles that made the two bridges look different.

Joe says. "No human being could sit in it for more than 15 minutes at the outside; it looked real weird, and it put you in sort of a kneeling position. And we wanted to put something Vulcan in his quarters. Tommy came up with the idea for that too. We saw a Sparklets bottled water truck, and on the back of it was a sign that was made out of little

mirrored metal disks, like a mosaic. They all hung on a peg so that when the wind came along the whole thing sparkled. We thought, 'OK, why don't we build a tapestry for one wall that's made out of these things.'"

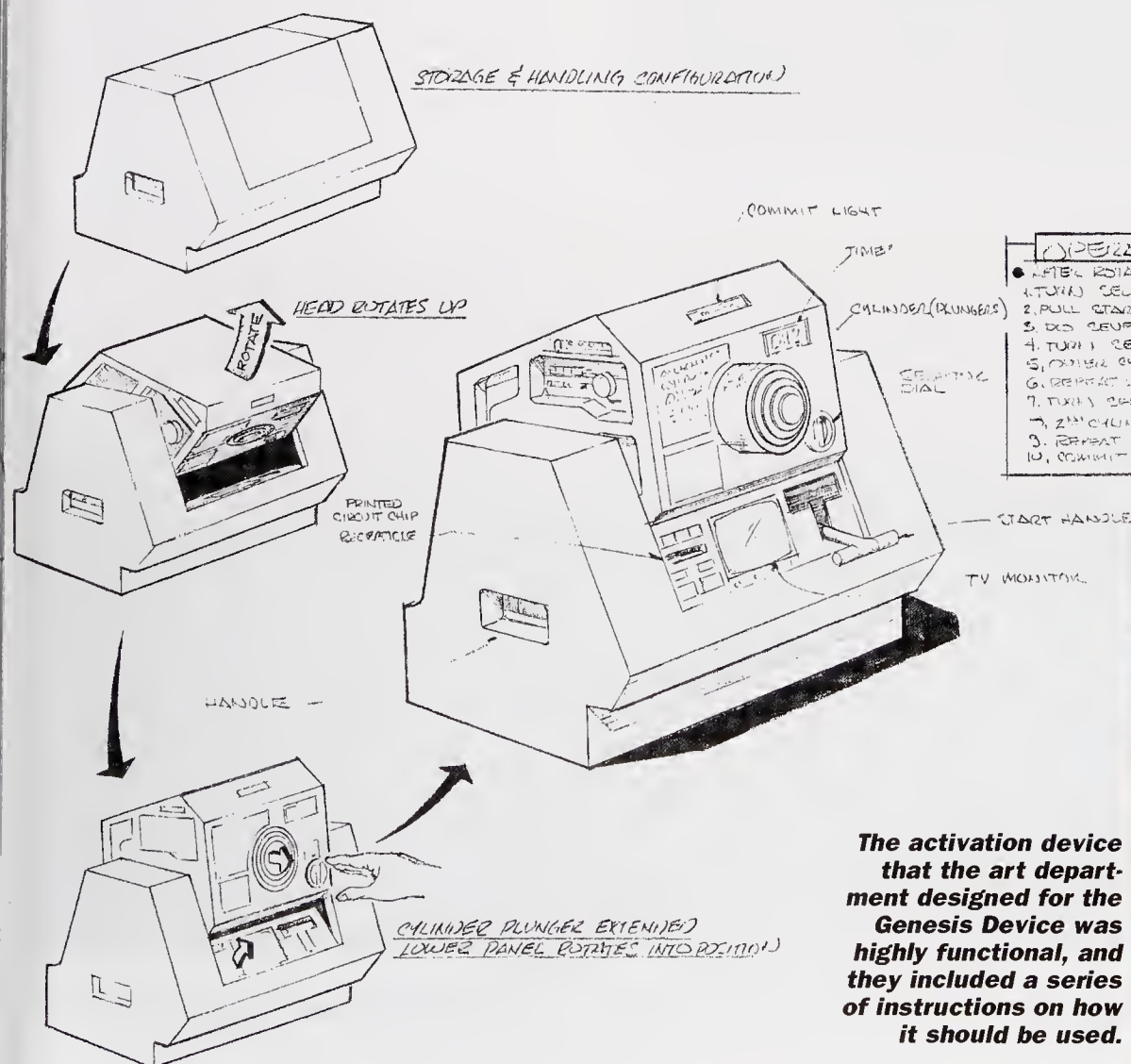
The *Enterprise* bridge set was also adapted to serve as the bridge of the *U.S.S. Reliant* NCC-1864. "We had one thing going for us,"

Joe says. "There's a great deal of similarity between the bridge of a destroyer and the bridge of a cruiser in the American Navy. We gave it a change of color and orientation, and we got rid of the big screen in front. As I recall, we changed some of the seating arrangements and the elevators a little bit, and, of course, we added the ceiling piece to it, because the beam had to come down and pin Ricardo to the floor. That whole ceiling piece was something that had never been featured in the bridge of the *Enterprise*. That gave it a different look."

A new starship

In the earliest scripts, the *Reliant* was a sister ship to the *Enterprise*, so the outside looked exactly like Kirk's vessel; but, as Joe says, this would obviously have caused some problems. "In the dogfight you had to instantly recognize which ship you were looking at, so they had to look different. At the same time, you had to make them look like they came from the same culture and had the same technology."

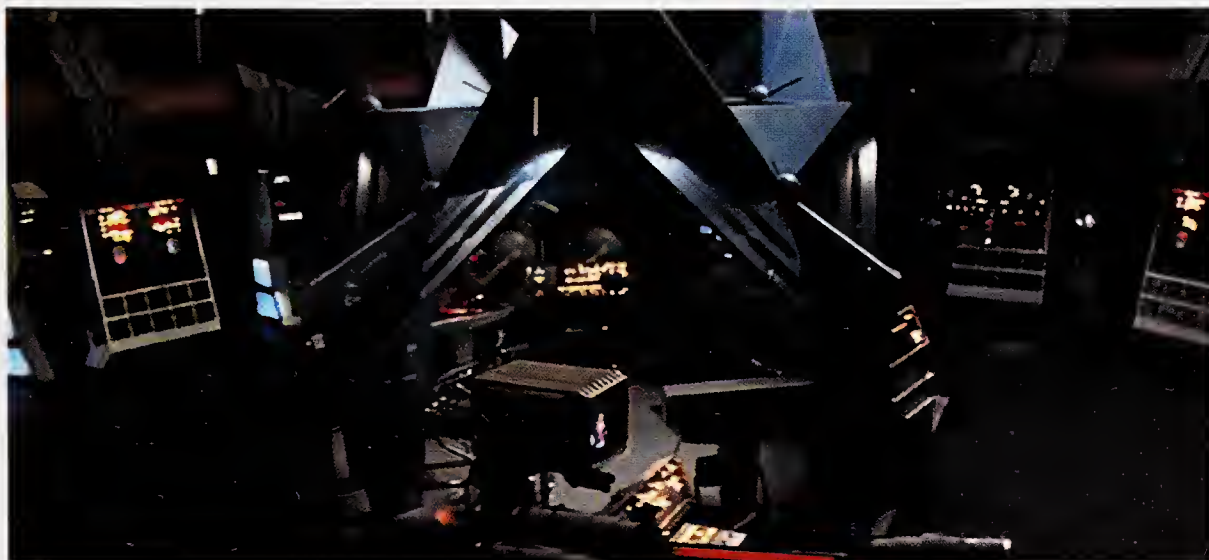
Joe remembers that he, Mike, and Lee Cole worked together to design a new vessel, which was something that hadn't happened for a long time. "It was the first time a new space-ship had been designed since the Klingon battle cruiser. That was a lot of fun. She was supposed to be a coastal and geodetic survey ship, like a buoy tender. She would be armed, perhaps, but only lightly; she wasn't a lion ship



The activation device that the art department designed for the Genesis Device was highly functional, and they included a series of instructions on how it should be used.



Behind the Scenes



The structural unit at the center of the Regula I lab was actually made up of a series of triangular pieces that could be locked together. The second level around the edge of the room was included to provide somewhere to hang the scientists' bodies from.

like the *Enterprise*. Also, remember the *Enterprise* was always supposed to be an exploratory vessel, where the armament was secondary. That was even more true for the *Reliant*; she was supposed to just stick around in the known universe and take care of things that everybody already knew about."

The designers came up with a number of different schemes, but settled on what was essentially a compressed version of Kirk's ship. "It was fun to try to make it look identifiably different; we had long postulated that the circular saucer said 'This is Starfleet Navy,' and it used engines that looked pretty much like those on the *Enterprise*."

Turned on its head

There is one very significant difference between the original design for the *Reliant* and the ship that appeared on screen – it's the other way up. Lee Cole remembers that for much of the production Harve Bennett was in Israel or London, supervising the TV movie 'A Woman Called Golda.' "We were mailing everything over to him and getting him to approve it and mail it back to us, so we did our first sketches of the ship and mailed them off to him. He was supposed to sign at the bottom to approve it. When he got it in the mail he took it out of the package upside down, I guess, and wrote out on the bottom, 'Yes, this looks very good, proceed.' So, when we got it back we realized he'd approved it upside down. We spent about half an hour deciding whether to send it back to him. Finally, we decided that, because of all the things on his mind, we would make it work upside down."

Once this choice had been made, Joe worked with Lee to design an element

that could support the dropped nacelles which Mike dubbed the 'roll bar.' Lee then produced a massive set of drawings, which were sent down to ILM.

Toy structures

The outside of Regula I was a modified version of the orbital office complex from the first movie, but the interior was an entirely new set. "The challenge, as always, was to try to make a space station that didn't look like any space station anybody else had seen," Joe remembers. He goes on to say that, although the station was futuristic, one of the most significant elements came out of a visit to a museum. "The central core of the thing was interesting. When my son was little we took him to the county museum, and one of the things he came home with was this little set of plastic equilateral triangles with slots cut in the apexes; you put them all together and they formed a geometric shape. He loved it,

and I liked it because you could do all kinds of wild things with it; it generated its own forms.

"It looked to be very structurally sound, so I thought, 'Well, why not build a big one?' I couldn't draw it, and Mike couldn't illustrate it, so we built a model out of cardboard, and it worked just fine. We took that down to the boys on the floor, and they said they could build it; first they built a small one, and it went together real fine; then they started building the big one. They built all of these triangles and started slipping them together, but when they got down to the last one, there was no way it would go in.

The wrong size

"You could bend all of our smaller ones a little bit, but when you got to the big ones, you couldn't. It would have worked fine had you been the Jolly Green Giant and been able to move all of these pieces into their position at the same time. I think we drove our layout man crazy; it really hurt his soul that he had to cut the legs off this one last triangle to put it together.

"It did prove to be extremely stable, though; you could climb all over that thing. We used it as a core member, with the instrumentation attached to it. Then we ringed it with a torus that sort of suggested atomic energy. We had to have an overhead anyway for them to hang the bodies from."

The movie also gave us another look at Starfleet Headquarters, when Kirk walked out of the simulator and headed for an elevator. Joe says this set was actually much, much smaller than it appeared. "Mike had a bright idea; he went out to several hardware stores and came back with a birdbath, a planter, and a bunch of junk. He went off and fiddled with it for about two days, and he came up with a



This Starfleet HQ set uses a perspective trick to look much bigger than it really is. The foreground elements are actually small models that are very close to the camera. This creates the illusion that the actors are in a much larger room than they actually are.

miniature. We put that in the foreground as what is called a 'cutting piece,' and the real set was in the background. They tied together visually and created a perspective trick that made the set look much bigger."

At home with Admiral Kirk

The next time we saw Kirk, he was in his apartment. Joe has fond memories of this set, and says that the challenge was to make it clear that it was in San Francisco, but also show that it was a 23rd-century building. The setting was established by using a backdrop showing the Golden Gate bridge that had been made for 'The Towering Inferno.' The next task, Joe says, was to make the room look futuristic. "You set up your frame of reference, and then within that you've got to be honest, which will lend credibility to the physical aspects of your show. Like all architecture, it has to look as though it's possible to live in it; you look for materials, for instance, that are unfamiliar, or that are being used in an unfamiliar fashion, to make your design look different from what the public is seeing today."

This approach can be seen in action in the small hallway by Kirk's door. "In the entryway the walls, the ceiling, and the floor were all mirrored, so when you walked in you appeared to be sort of floating. It was a very small area of the set, and we only got a couple of glimpses of it, so it worked fine."

Despite the need to make the apartment look futuristic, Nick Meyer also impressed on



Kirk's apartment in San Francisco was filled with collectables that demonstrated his interest in the past, including many nautical objects that Nick Meyer asked for.



The set featured an unusual entryway in which the walls and floor are mirrored, creating the impression that visitors were floating in mid-air as they entered the room.



The set for Ceti Alpha V was probably the largest in the movie, and certainly the most unpleasant to work in. The rocky surface was built on a platform above the stage and then filled with sand and fuller's earth. The wind was then generated by six enormous Ritter fans, which looked like small airplane engines; there was so much dust that the crew had to wear protective clothing.

Behind the Scenes



The Genesis cave was meant to be a paradise – the script once referred to it as Eden – and it was filled with exotic plants the team had ordered specially.

them that he didn't believe that things would change that much in the future, so the apartment still had to look like a home. Joe says, "A fireplace would be an anachronism but would still fit Kirk's image of having a cozy place to live, so we had to make a fireplace that looked a little different; hence we used the curved wall and the mosaic treatment behind it."

Nick also wanted to suggest that Kirk had too much time on his hands in retirement and had a real attachment to the past, so Joe and his team filled the set with antique collectables. However, he remembers, this did present them with a slight problem. "We

wanted him to have a collection of models of old spaceships. But if you've got a model of a Titan rocket sitting there, and this is supposed to be an antique, what does the audience think? An antique to Captain Kirk is the cutting edge of technology today, so it twists your imagination a little bit."

If the brief for Kirk's apartment was that it should look domestic, Ceti Alpha V and the Genesis cave had to be alien worlds. Ceti Alpha V was designed as a living hell for Khan and his followers, and Joe remembers that, unfortunately, they weren't the only people who suffered. "The entire crew hated

it tremendously! Of course, you couldn't exactly shoot it on a practical location, so we built it on a stage. We elected to put the marooned spaceship down into a depression, which helped give us a skyline so that you didn't have to see for ever and ever.

Sand storm

"It was an uncomfortable three or four days shooting those sequences; I had six big fans sitting across one end of the stage, and they would all fire up at the same time. Boy, we could just fill that stage full of dust and sand and everything else. Everybody was running around with goggles and face masks on, so it was fairly uncomfortable. Every night, the camera crew had to tear the cameras down and clean them all out, because they would be full of grit."

At the opposite extreme, the Genesis cave was meant to be heaven. Joe remembers that the script gave him and Mike very few clues as to what it should look like. "The script just said that they go inside the planetoid and that it has been changed by this incredible Genesis explosion. It was up to us to come up with what it really looked like.

"We started with the premise that there would be a lot of heat and a lot of bubbling. Mike and I saw a magazine picture of a malted milkshake with a big bubbly top

Mike Minor provided ILM with concept paintings that were used as the basis for the matte paintings used in the movie.



Courtesy of Bob Burns



The matte painting was designed to work with a relatively small insert piece that could be filmed on stage.



Courtesy of Bob Burns

on it, and all of the bubbles attached to one another; I said, "That's the way the inside of this thing should look: like it's all composed of busted bubbles." Then we decided the columns that would hold it up would be like an apple core, with bites out of it."

Broken bubble

Most of the cave was shown by using a matte painting. Mike produced a number of concepts that showed the cave as a whole, and he and Joe worked out how to build a small section on the sound stage to film the live action sequences.

"We decided to build the inside of a busted bubble that was about 60 feet across," Joe remembers. "We got an old globe from a porch light, and we broke it; that gave us a shell with a fractured look that seemed correct, so that became the pattern for the inside of our major bubble. Now, how are we going to accomplish this? We decided it would probably have to be made out of fiberglass. But what could we use for a mold? Well, we found out about a little man who made swimming pool enclosures out of plastic. The molds were like balloons and he had a little teeny fan that kept it inflated.

"We went to him and said, 'Can you build a hemispherical one,' and he said, 'Yeah.' We thought we would need some other-sized



The small part of the cave was made of fiberglass, and was meant to show an exploded bubble.

bubbles to go with it, so as an experiment he built us three different sizes. We blew the molds up and sprayed the fiberglass onto the outside of them with a chopper gun, then we would simply deflate the mold, pull it out from underneath and it worked fine. When we turned that fiberglass shell over, we had the inside of a bubble.

"Then he built us the big one and we blew it up inside a frame with its open side flat on the stage floor. The plastermen came in and began to spray the plastic over the outside of it and tie it off to the frame. We went back to our office, but after a while the construction coordinator called me and said, 'You'd better get your tail down here on stage! This thing

is rising into the air.' What was happening was that the heat from the setting plastic was making the air expand, so we were blowing the balloon up more and more and more, and it was jacking the framework off the ground. We simply lowered the air pressure inside it and it worked just fine. Then when we pulled our mold out we took a crane and rolled it over on its side, and that became the inside of the bubble that they make their entrance into."

The dawn of time

The finishing touch for the Genesis cave was a collection of suitably alien-looking vegetation. "Because this was Genesis, we wanted it to look maybe a little primitive: back to the beginning of time. We found a gentleman who grew exotic flowers for the florist trade, and he came up with about two truckloads of the wildest-looking stuff I ever saw in my life – plants from South Africa and South America and all – and that's what we dressed the set with."

In the course of the movie, the *Enterprise* came into its own, the *Reliant* was destroyed, and we visited both heaven and hell. Looking back, Joe is very pleased with every aspect of the production. "It was a successful job well done," he smiles. "And that is always very satisfying." ☆

The Ba'Neth

The Ba'Neth are a mysterious multipled race who are so paranoid about being exposed that they have developed a sophisticated veridium-based cloaking technology to prevent other species learning of their existence.

The Ba'Neth are a Delta Quadrant species who are extremely paranoid and obsessed with keeping their existence a secret. To help them achieve this, they have developed sophisticated cloaking technology that can render not only their starships invisible, but also individual members of their species.

The Ba'Neth are also extremely xenophobic; they're so suspicious of outsiders that they devote a considerable amount of their time and resources to secretly monitoring any unfamiliar ships passing through their territory in order to assess any danger the craft may pose. Like the Srivani, another Delta Quadrant species,

the Ba'Neth can even board alien ships without being detected. This allows them to conduct a thorough investigation of the interloper's technology, and even access their computer records, so that they can devise informed and effective countermeasures against any possible hostile actions.

Silencing witnesses

If the Ba'Neth conducting the reconnaissance mission is discovered, they have no compunction in using a particularly devastating neural disruptor weapon on anyone who stumbles across them. This firearm is designed to inflict the utmost damage so

that, if it doesn't actually kill the unfortunate victim, it will leave them with such severe neural damage that they will be unable to tell anyone what they saw.

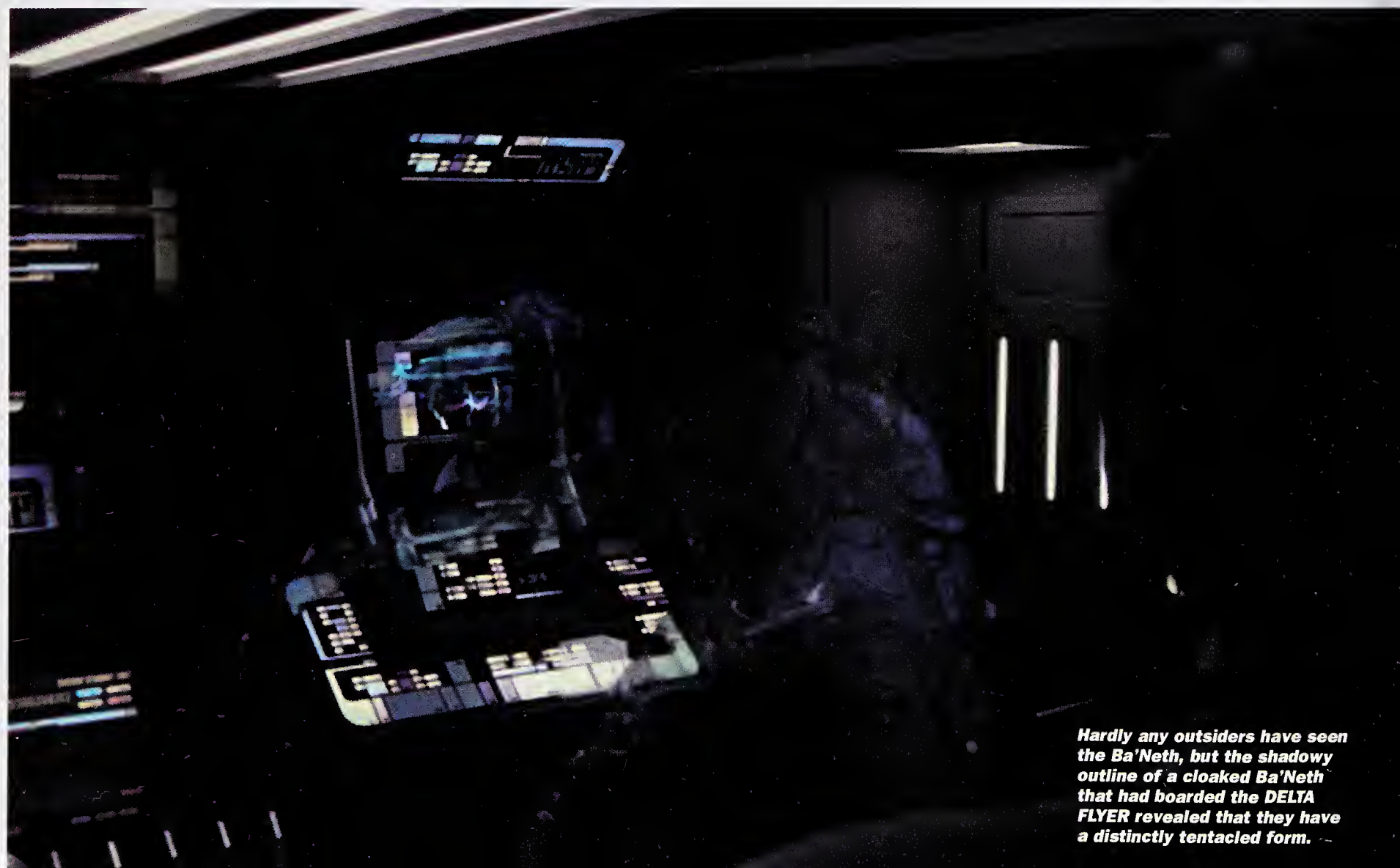
The Ba'Neth made such a good job of preserving their anonymity that, up until 2376, no one had any idea what they looked like. Moreover, the Kesat government, the nearest neighboring species, were far from convinced that they were not just figments of people's overactive imaginations and denied that they existed; this is why the Kesat named them the Ba'Neth, which in their language means 'shadow people.'

However, there were some members of the Kesat, including

Naroq, who firmly believed in their existence. He had worked on as many as 12 cases, in his capacity as a deputy investigator for Kesat security, that could only be explained by the existence of this elusive race, but until an encounter with the *U.S.S. Voyager NCC-74656* he had been unable to prove his theories.

Uncloaking the Ba'Neth

Using an invention of his own called a photolitic converter, Naroq examined the area on board the *Delta Flyer* where Tuvok had been attacked by a mysterious alien. This high-tech piece of apparatus was designed to detect the presence of veridium isotopes



Hardly any outsiders have seen the Ba'Neth, but the shadowy outline of a cloaked Ba'Neth that had boarded the DELTA FLYER revealed that they have a distinctly tentacled form.

Neural disruptor

The neural disruptor used by the Ba’Neth is the perfect weapon for the xenophobic race; the injuries it inflicts are that anyone who survives an attack is unlikely to be able to reveal any details. For example, Tuvok’s cognitive, memory, and logic centers were all severely damaged by the weapon, while the tricorder he was using to record their cloaking frequency was left

charred and smoking. However, Vulcan neural tissue is unusually resilient, and Tuvok was eventually able to indicate the cloaking frequency that he had scanned before he was attacked. This led the *Voyager* crew to the Ba’Neth space station, where they were able to obtain the information they needed on the neural weapon for the Doctor to restore Tuvok’s health.



Tuvok was attacked when he tried to scan a cloaked being who was down- loading information from the aft tactical station on the DELTA FLYER. The Ba’Neth’s neural disruptor struck Tuvok’s tricorder before snaking up his arm and crackling around his head, causing severe neurological damage.

The residual particles that Narok believed the Ba’Neth’s cloaking field left behind. Veridium usually disappears in less than 24 hours, but because the attack on Tuvok had happened recently, the isotopes were still active, and the photolitic converter revealed the shadowy silhouette of an alien in a distinctly tentacled form. This was the first time that the Ba’Neth had ever been glimpsed,

and it confirmed Narok’s suspicion that they were a multipied species. The *Voyager* crew integrated Narok’s photolitic converter into the ship’s deflector array in the hope that they could use it to detect cloaked Ba’Neth ships. When they tried their first test, the crew found that they were surrounded by several Ba’Neth ships. Once the Ba’Neth had been

discovered, their first instinct was to open fire. This was consistent with their actions when discovered individually, and showed that they clearly valued their privacy above the lives of other beings. **Remaining a mystery** The *Voyager* crew were eventually able to use the the photolitic converter to uncover a huge Ba’Neth space station. At first,

the Ba’Neth were unwilling to reveal any of their technology, but they complied when Narok, who they had been watching for years, agreed to hand over the photolitic converter so that they could adapt their technology and no longer be exposed by it. Even though their existence had been proved beyond doubt, it appeared that the Ba’Neth intended to maintain their anonymity.



Narok told the VOYAGER crew that the attack on Tuvok showed all the signs of being carried out by the Ba’Neth. Narok used a device of his own croation, called a photolitic converter, to expose the cloaked Ba’Neth.

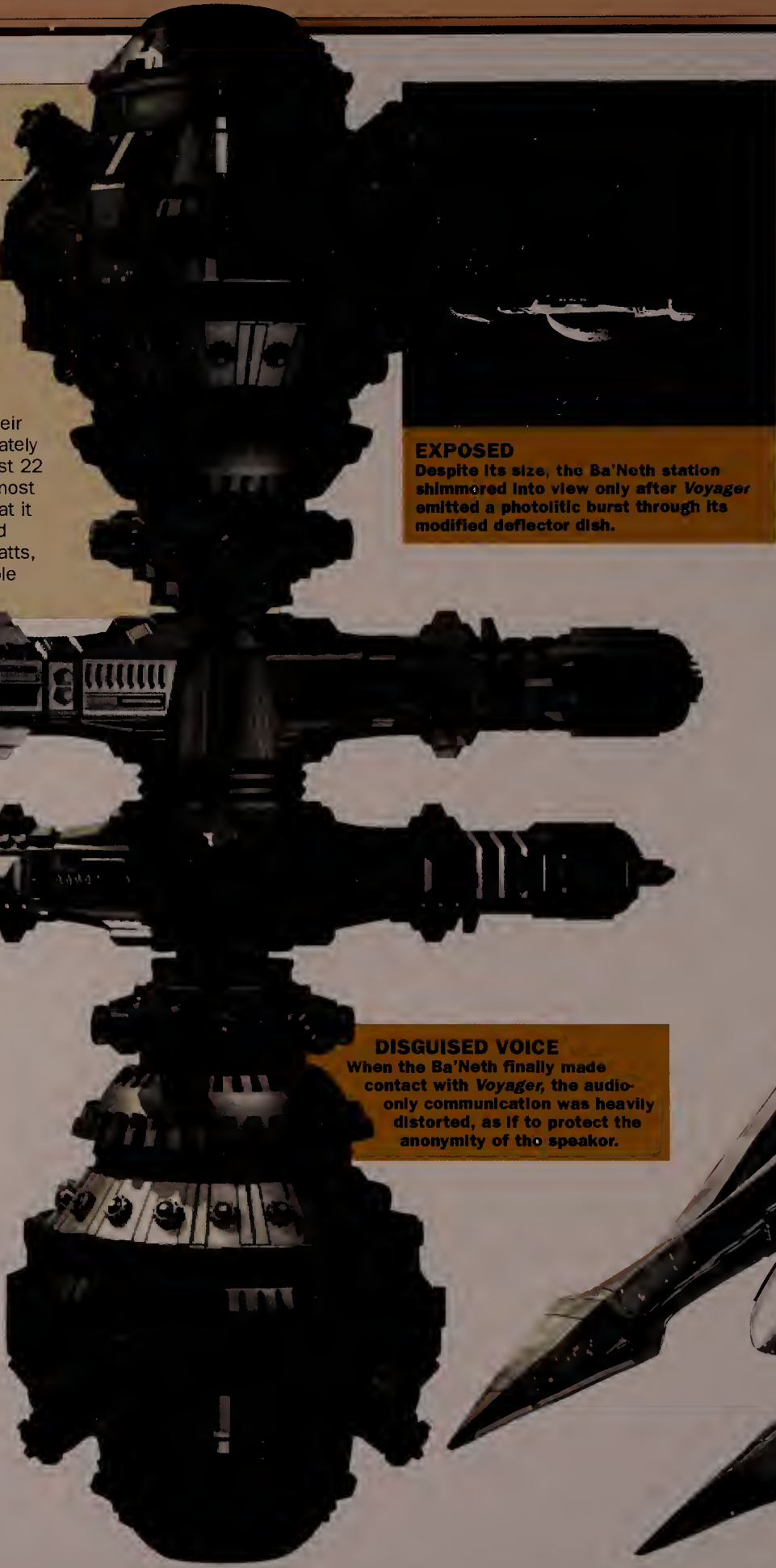
Ba’Neth Station

Using a huge cloaked space station as a base for their fleet of ships, the Ba’Neth secretly monitored any ships entering their region of space.

The gargantuan Ba’Neth station that the crew of the U.S.S. *Voyager* NCC-74656 encountered in 2376 was a heavily armed outpost that served as a permanent base for their fleets of ships. It could accommodate approximately 3,000 life forms and provide facilities for at least 22 ships. As impressive as these figures are, the most remarkable feature of this space station was that it was completely invisible. Using a veridium-based cloaking field that generated nine million terrawatts, the Ba’Neth outpost was completely undetectable to alien sensors.



DOCKING FACILITIES A series of protruding docking arms around the central body of the space station suggested that it was a major base for the Ba’Neth fleet.



EXPOSED Despite its size, the Ba’Neth station shimmered into view only after *Voyager* emitted a photolitic burst through its modified deflector dish.

DISGUISED VOICE When the Ba’Neth finally made contact with *Voyager*, the audio-only communication was heavily distorted, as if to protect the anonymity of the speaker.

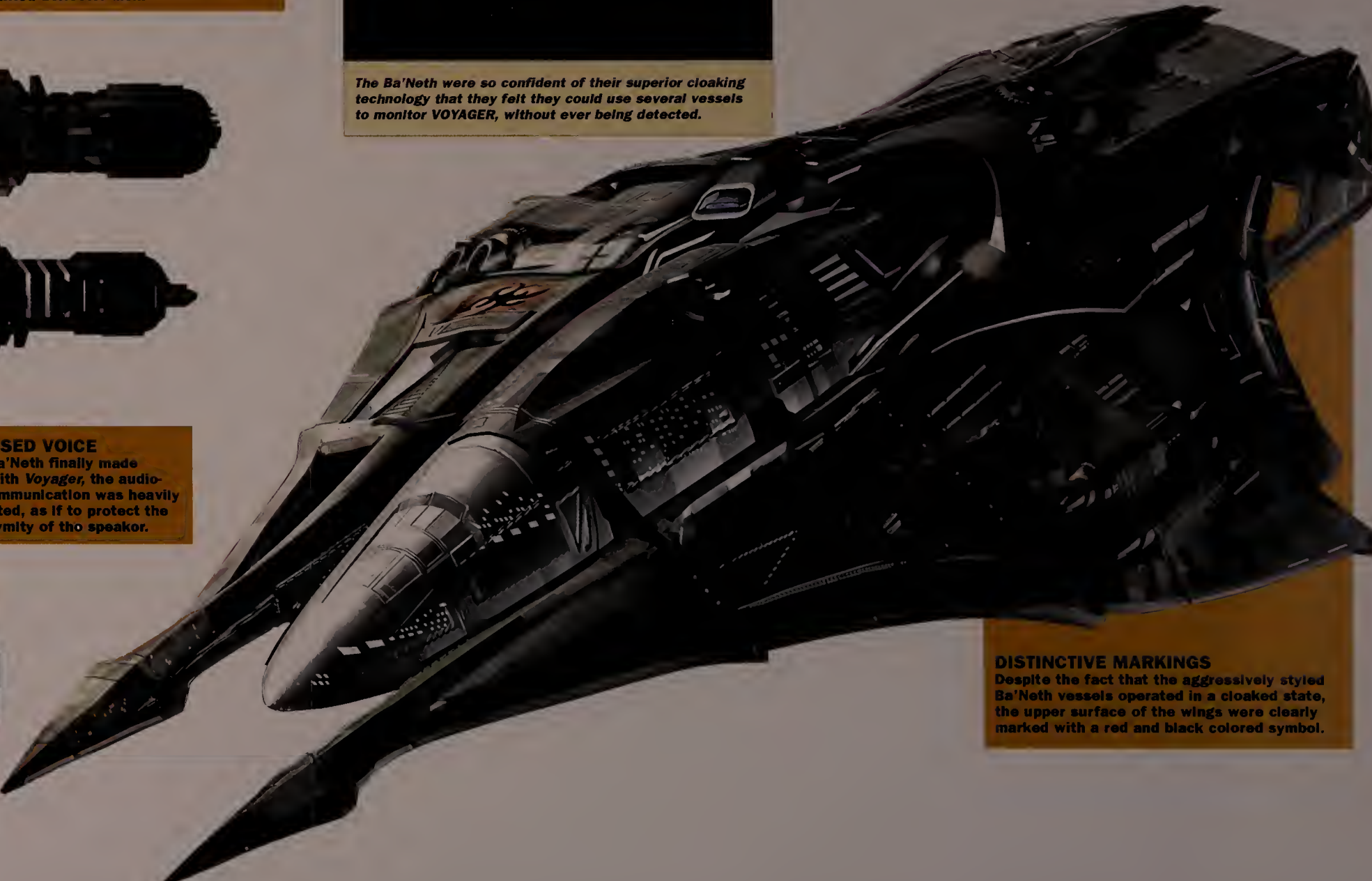
Ba’Neth Vessel

The small, fast vessels used by the Ba’Neth in 2376 were able to fire while cloaked, although they were more likely to flee if discovered.

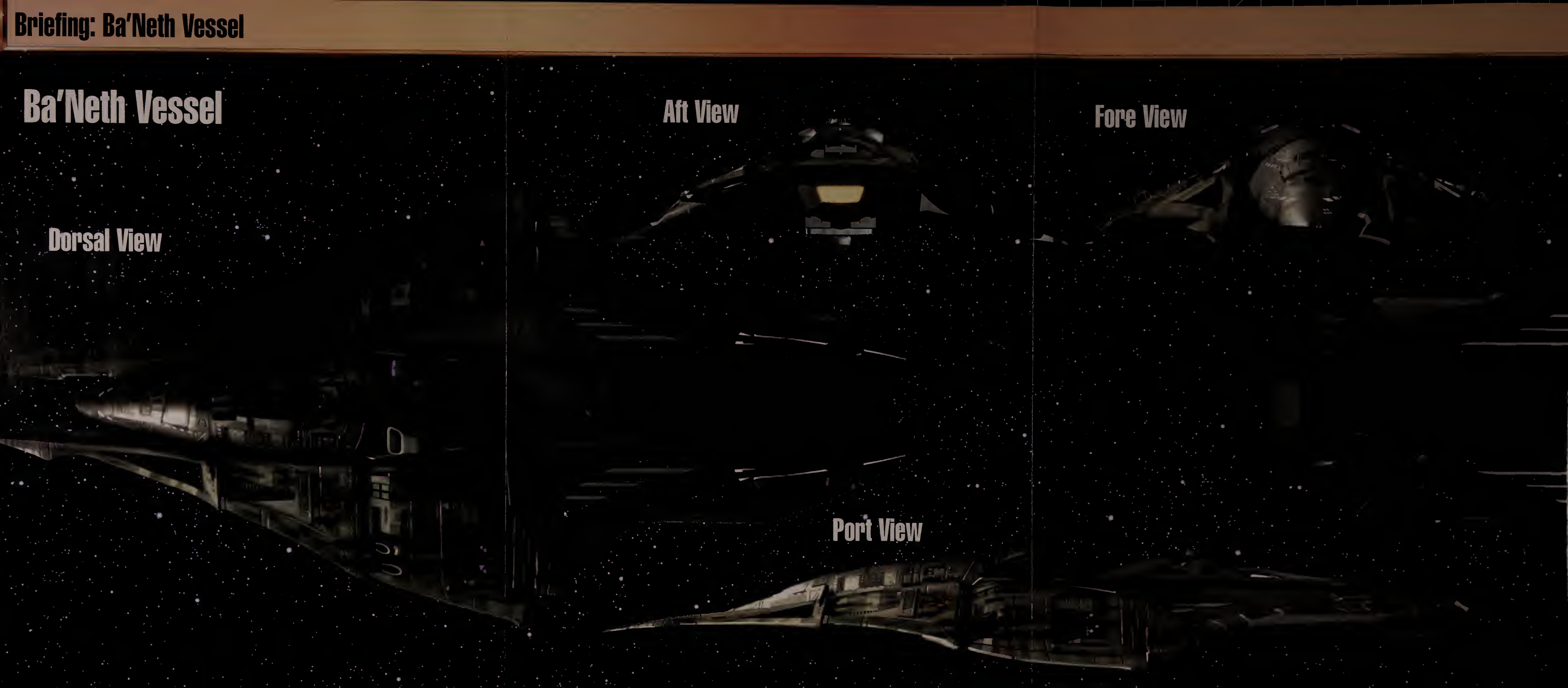


The Ba’Neth were so confident of their superior cloaking technology that they felt they could use several vessels to monitor VOYAGER, without ever being detected.

HIT AND RUN The *Voyager* crew were among the first people ever to see a Ba’Neth vessel. Although it fired on the Starfleet ship, it did little damage, suggesting that its weaponry was not very powerful.



DISTINCTIVE MARKINGS Despite the fact that the aggressively styled Ba’Neth vessels operated in a cloaked state, the upper surface of the wings were clearly marked with a red and black colored symbol.



Ba'Neth Vessel

Dorsal View

Aft View

Fore View

Port View



Ventral View

The Early Scripts

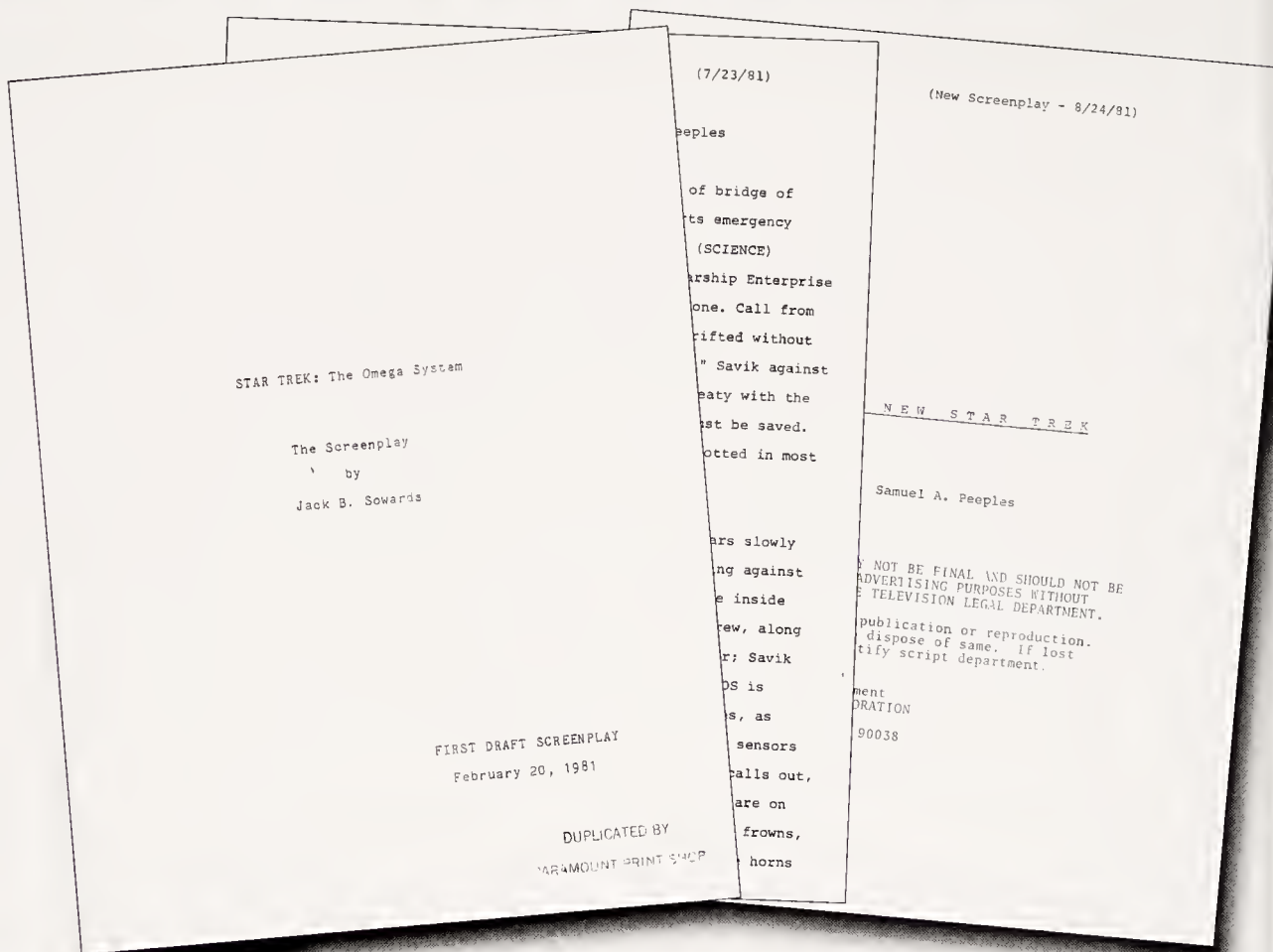
It didn't take executive producer Harve Bennett long to decide that the second *STAR TREK* movie would pit James Kirk against his old adversary Khan Noonien Singh, but getting a workable script in place was a different matter.

It took the best part of five years to write the first *STAR TREK* movie, and when it was done nobody, not even the screenwriters, was entirely satisfied with the end results. However, despite its weaknesses, *STAR TREK: THE MOTION PICTURE* was a hit, so it was no surprise that Paramount Pictures decided to develop a sequel. With Gene Roddenberry stepping into the background, they handed the project over to executive producer Harve Bennett, a hugely admired writer and producer who had run TV shows such as 'The Mod Squad' and 'The Six Million Dollar Man.' Harve's job was to develop a script that could be filmed on a reasonable budget, and put a new *STAR TREK* movie in theaters in the summer of 1982.

The right tone

One of the biggest problems was finding the right approach to the material. The first movie had certainly adopted a very serious and epic style, which most people, including Harve, felt was inappropriate. Somehow, the sequel would have to capture the essential heart of the show and give the audience what they had been waiting for.

Harve began work by sitting down and watching the original episodes. As he remembers, he soon came to some important conclusions about the character dynamics. "I saw all of the episodes in preparation for the task [of making *STAR TREK II*]. What I saw was a triangle in which Spock obviously represented logic; Bones, to me, represented passion; and Kirk, at the top of the triangle, represented command and reason, and resolution between the two. That is not to say that Kirk himself is not a passionate person, but if you think of all the episodes, it's generally Kirk saying, 'What do you think, Spock?' 'What do you think, Bones?' Then usually it's a middle ground between the two of them."



Harve's trawl through the episodes also provided him with something else. He was determined that his movie would have something the first one lacked – a real villain. When he saw 'Space Seed' he was struck by Ricardo Montalban's performance as Khan, and decided that he would make the perfect villain for a movie.

The first treatment

In November 1980 he wrote a treatment called '*STAR TREK II: The War of the Generations*.' In this story Kirk is called to investigate a rebellion on a Federation world. Along the way, he rescues a woman he was once in love with and learns that their son –

who he never knew had been born – is one of the leaders of the rebellion. When he arrives on the planet, Kirk is captured and sentenced to death by his own son, before we learn that Khan is actually behind the rebellion. Kirk and his son then join forces to defeat Khan, and the movie ends with Kirk's son joining the crew of the *U.S.S. Enterprise NCC-1701*.

Harve had already decided that one of the movie's major themes would be that the characters were aging. In the drafts that followed, Kirk was consistently confronted with a son he knew little about, Spock was often preoccupied with death, and, in the later versions, McCoy had to struggle with his feelings for a much younger woman, who had



Executive producer Harve Bennett decided that, far from distancing his movie from the original series, he would follow up on several elements. 'Space Seed' provided him with his villain, Khan Noonien Singh, and his lover, Marla McGivers, who appeared in all the early drafts of the script. 'The Deadly Years' provided the character of Dr. Janet Wallace, who eventually changed into Carol Marcus.

made it clear that she was interested in him.

Harve still had to turn his outline into a workable script that could be shot, so he hired Jack B. Sowards, who had written several admired movies of the week and was a self-confessed *STAR TREK* fan. Jack instantly had a major impact. Harve's original treatment made no mention of Spock, because Leonard Nimoy had made it clear he was not keen to make a second *STAR TREK* movie. Jack, however, thought he had a way of persuading Leonard to return. He suggested that Harve tell Leonard that in this movie Spock would die a little more than a third of the way into the story. The opportunity to play his death scene was too good for Leonard to pass up, and he agreed to come aboard. From this point on, all the scripts featured Spock's death, although its position in the movie would inevitably be pushed toward the dramatic conclusion.

Jack had only a few months to write a full script before a writers' strike was called in April 1981. By late February he had produced a first draft script that significantly expanded Harve's outline and added several vital elements. This script introduced the idea that the Federation was preparing to test a terrible weapon known as the Omega System.

A full script

The movie opened with Captain Clark Terrell and his first officer, Mr. Chekov, beaming down to Ceti Alpha V (which had been selected as a test site) to make sure the planet was as dead as sensor readings suggested. Starfleet knew that Kirk had left Khan and his people stranded on the planet, but were amazed to discover that he and a handful of his followers, including Marla McGivers, had survived. A vengeful Khan took control of Terrell and Chekov, using

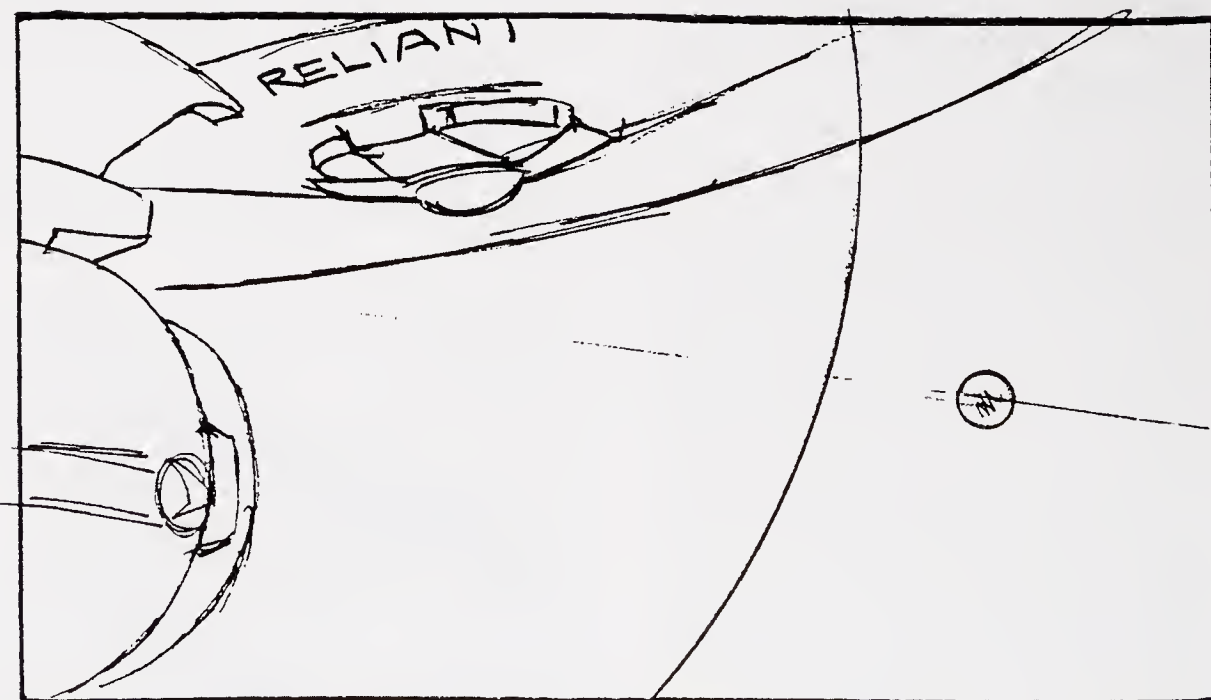
spider-like creatures known as 'wee beasts,' which attached to a point between a person's shoulder blades.

Khan then used Terrell and Chekov to try to take control of Project Omega, which was based on the planet Gamma Regula IV, but, before he could succeed the project leader, Dr. Janet Wallace, and her son David became suspicious. (Janet Wallace was, of course, one of Kirk's old girlfriends from the original series.) Janet contacted Kirk, but was too worried about the situation to tell him what was going on over an open comm link.

Terrell then claimed that Kirk had ordered the Omega System to be loaded onto the *U.S.S. Reliant*, which was a *Constitution*-class ship like the *Enterprise*, and made it clear that it was going to be used to fight the Klingons in the Neutral Zone.

David and his friends weren't prepared to start a war, so they stole all the Omega missiles and hid them in the desert. Meanwhile, Kirk was sufficiently concerned by Janet's message to join Captain Spock on the *Enterprise* and set a course for Gamma Regula IV. As he approached the planet, the *Enterprise* was attacked by the *Reliant*; the engines were badly damaged, and Spock sacrificed his life to get them back online in time for Kirk to fight the *Reliant* off.

After burying Spock in space, Kirk beamed down to Gamma Regula IV, where he insisted on making contact with the rebels. When he did so, he soon realized that Janet and David were in the right, and he returned to the base to relieve Terrell of command. However, Kirk had inadvertently led Khan to the Omega missiles, and he stole them from the rebels.



In the storyboards for early versions of the script, the U.S.S. RELIANT was almost identical to the U.S.S. ENTERPRISE, but this could obviously have caused some confusion.

Behind the Scenes



Jack B. Sowards suggested killing Spock, and in every version of the script he dies repairing the ship's engines.

Back at the base, Khan ordered Terrell and Chekov to kill Kirk. As in the finished movie, Terrell died but Chekov survived. Kirk then returned to the rebels, but they believed that he had stolen the missiles and sentenced him to death. In an effort to sway David, Janet revealed that Kirk was actually his father. Ironically, Kirk was saved when Khan realized that David still had the triggering devices for the missiles and returned to retrieve them.

During his isolation Khan had acquired impressive mental powers, and he and Kirk now fought a psychic battle in a variety of exotic locations, using quarterstaves, whips, and swords. Khan eventually won, but Kirk survived because he understood that the weapons were only illusory.

Khan escaped with the triggering devices, and the movie ended with a pitched space battle in orbit around the planet, in which Kirk defeated his enemy with his superior tactics.

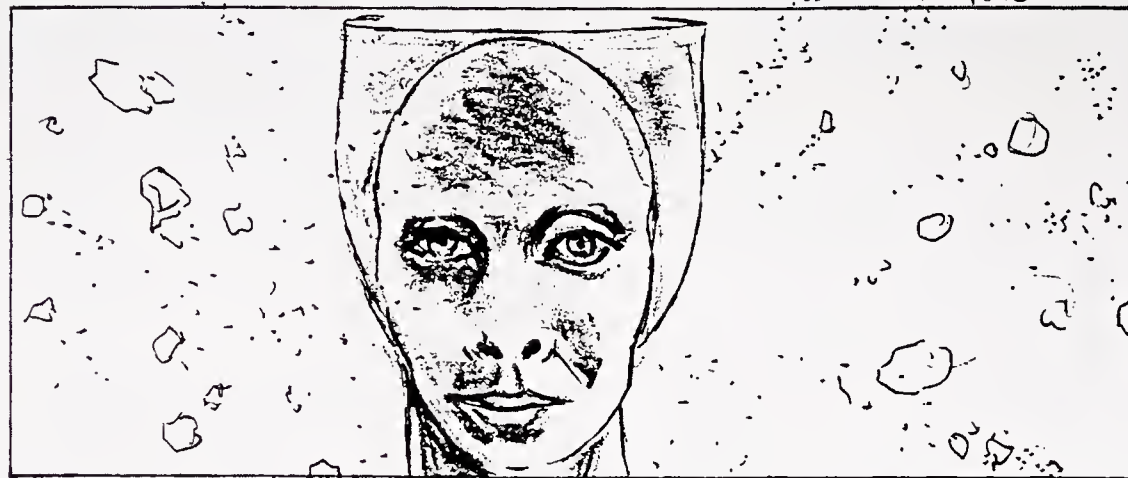
Love and renewal

This version of the movie also featured a romantic subplot in which Kirk began a relationship with a young bridge officer called Diana O'Rourke. In another important development, it introduced the character of Savik (note the spelling), a young Vulcan male who was Captain Spock's first officer on the *Enterprise*.

At this point, art director Michael Minor made an invaluable contribution. Harve was concerned that the Omega System was simply a weapon and that there was nothing uplifting about it, so Mike suggested turning it into a terraforming device. Because it would work by reordering matter on a planet's surface, it would still be a terrible weapon, but the Federation's goal was to

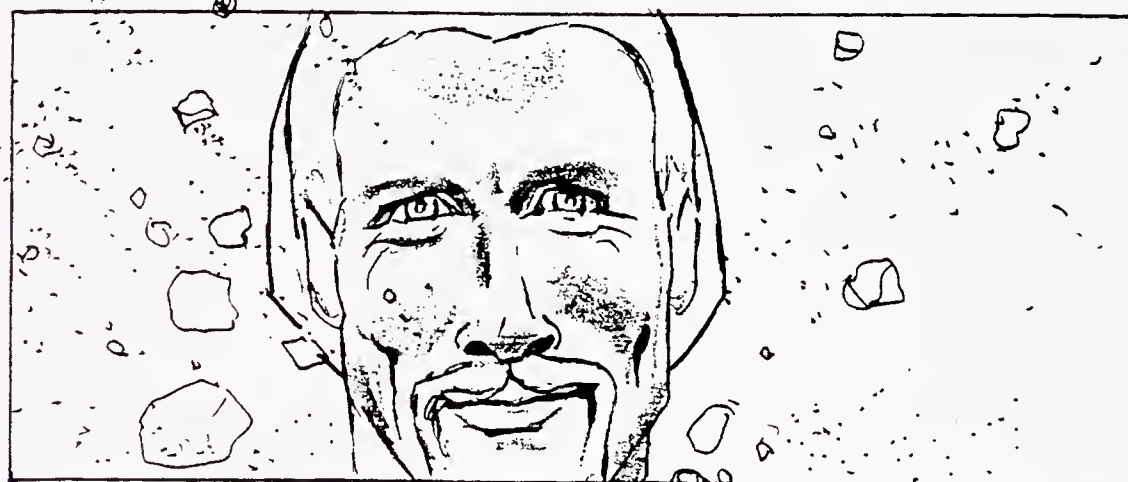


WIDE ANGLE - CRYSTALS POWDERIZE (OPTICAL) DISCUSS - GENRE VS PRACTICAL FX



MORAY APPEARS...

OUTRECK - EYES CLOSED, THEN OPEN



SOJIN APPEARS...

FX COST.

Samuel A. Peeples didn't want to use Khan and Marla McGivers, so he replaced them with two powerful beings from another dimension - Sojin and his mate Moray.

create a paradise, not to kill billions. Harve was delighted by this, and, in recognition of its Biblical power, the Omega System became the Genesis Device.

By April 10 Jack had produced another draft of the script that incorporated the change. In this version Janet Wallace had become Carol Baxter, and Spock's death had been pushed a little later in the story. During the final battle, Khan fired the Genesis Device at Kirk but hit a planet, which was reborn as the two starships continued their titanic struggle.

This draft also included the first version of the simulator sequence in which Savik failed

to rescue the *Kobayashi Maru*. When Savik questioned him about his failure, Kirk suggested that the *Kobayashi Maru* might be a 'no-win scenario.'

By now, pre-production had begun in earnest, and producer Robert Sallin and Mike Minor produced storyboards for the effects sequences. But, although this draft contained many, if not most, of the elements of the final script, Harve and Bob were not happy. To their minds, the script didn't have the epic sweep needed for a major movie.

So Harve turned to Samuel A. Peeples, who had written 'Where No Man Has Gone Before.' Peeples (who died in 1997) felt that up



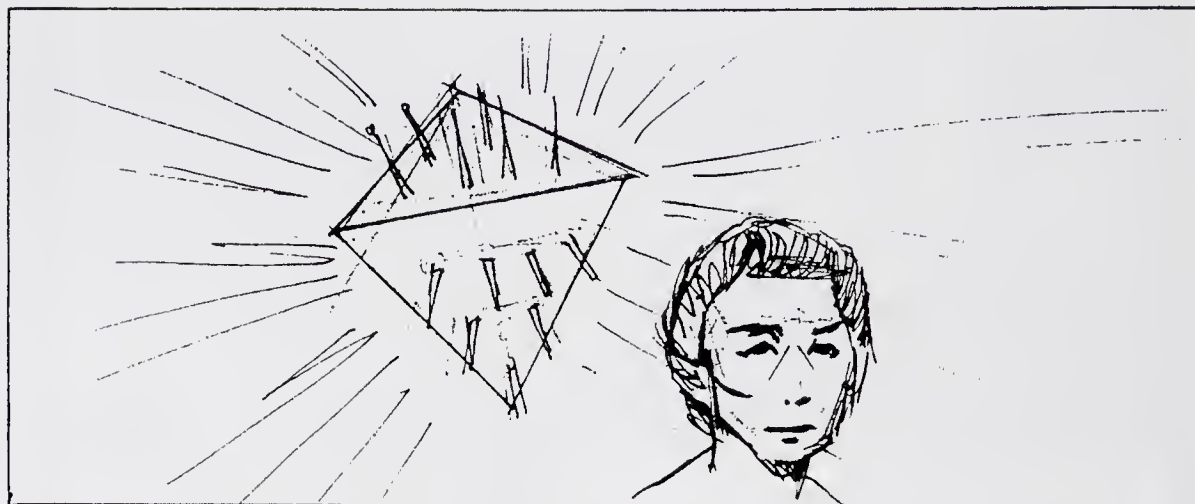
The first time Saavik appeared, she was a Vulcan male, but Peeples transformed him into a beautiful young woman who was half-Vulcan and half-Romulan.

to this point the story had been too much in the vein of the original series and proposed several major changes. He eliminated Khan and Marla McGivers and replaced them with two mysterious and powerful aliens called Sojin and Moray, who had been exiled from another dimension and possessed almost godlike abilities.

The same but different

Terrell metamorphosed into Sulu, who had been promoted to captain of the *Reliant*, and Saavik became a woman. Peeples also introduced some new characters on the *Enterprise*, including a helm officer called Thal Arctos, who was half Polar bear, and Uti Sorbayo, who was deeply in love with McCoy although he was easily old enough to be her father.

In general, the plot followed Jack Sowards' version quite closely, but with Sojin and Moray taking the place of Khan and Marla.



In Peeples' version of the script, Carol and David Baxter were defended by a robot called Ru-byk, who fought off Sulu and Chekov when they tried to collect the Genesis Device. Ru-byk was badly damaged in the fight but was rescued by David.

They took control of the *Reliant* and used it to attack the Genesis Project, forcing Carol and David to hide in the Genesis cave; the final battle took place in the Mutara Nebula; Spock died at the movie's conclusion, sacrificing himself to repair the engines; and, as they died, Sojin and Moray activated the Genesis Device, creating not one but dozens of new planets, which were formed out of the nebula.

An emotional Spock

The script, however, was not without its problems. In particular, Spock seemed uncharacteristically emotional. In fact, in this draft it is Spock's not Kirk's birthday, and the crew celebrate by singing 'Happy Birthday' to him in Vulcan. Spock was so moved that he had to wipe a tear from his cheek. (For those who are interested, the Vulcan for 'happy birthday' is 'Shika karf-tak pon tow'.) This script also had several elements that were highly reminiscent of 'Star Wars.' Carol and

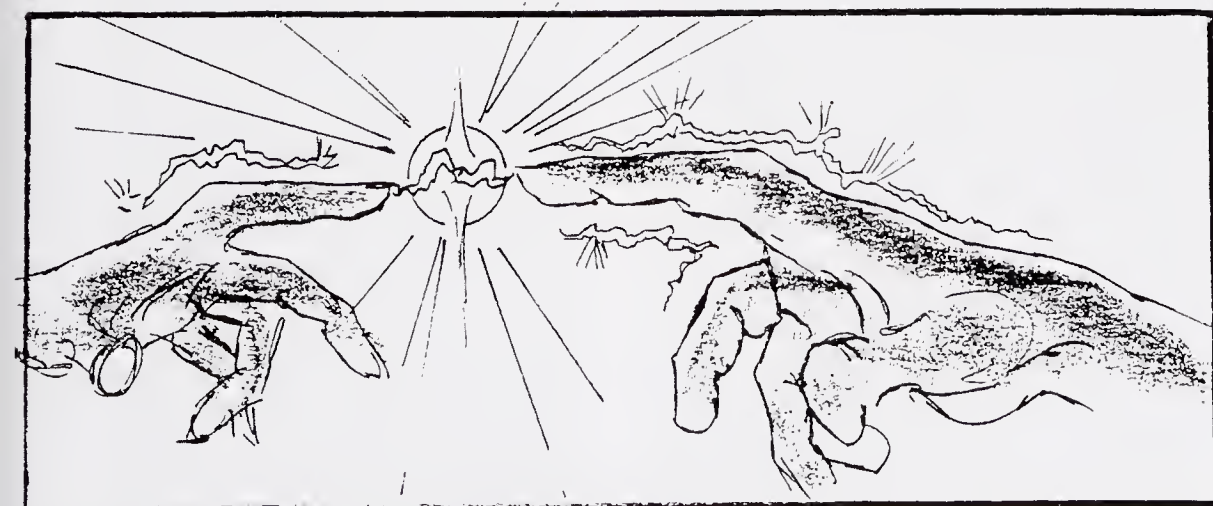
David were protected by a talkative robot called Ru-byk and, like Obi Wan Kenobi, Spock appeared as a 'ghost' after his death.

While Peeples was working on the script, Bob and Harve found a director they liked in the form of Nicholas Meyer. A week or so before the last draft was due to be delivered, they met with him and promised they would be back in touch as soon as they had the new script in their hands. Meanwhile, time pressures were becoming critical, and ILM told the producers that if they didn't have a script within a matter of weeks they wouldn't be able to deliver the effects in time for the planned release date.

In trouble

When the final Peeples draft arrived, Harve and Bob knew they couldn't film it. As Bob says, "We were off in some weird directions and I was really very concerned. It did not feel like a motion picture to me. Some of these ideas were too derivative and were too small in their scope. There wasn't anything underlying it. It was more about people shooting fire and things like that, as opposed to a real story."

Three weeks after their last meeting, Nick Meyer called Harve and asked where the script was. He remembers Harve's response to this day. "He said, 'The draft turned up, and it's no good; it's nothing.' I said, 'Let me read it.' He said, 'No, no; I'd be embarrassed to show it to you.'" Nick eventually persuaded Harve to send him the draft, and he recalls that he wasn't impressed. Then Nick made a fateful decision. He called Harve and told him and Bob Sallin to come up to his house with all the different drafts of the script. He had an idea ...



Sojin and Moray possessed abilities that seemed like magic; they could read minds, and had the ability to make the RELIANT phase in and out of our dimension.

The Undiscovered Country

Nicholas Meyer is best known for directing *STAR TREK II*, but he also had a major hand in writing the script. His first draft was called 'The Undiscovered Country,' and it established the movie's themes of death, friendship, and old age.

It is the fall of 1981, and we are in the home of director and Oscar-nominated screenwriter Nicholas Meyer. Nick is sitting at a table with two other men — Harve Bennett, the executive producer of the new *STAR TREK* movie, and his producer Robert Sallin. Between them is a pile of scripts and treatments. Nick holds a yellow legal pad in one hand. “OK, here’s my idea,” he says. “Let’s sit here and make a list of all the things we like in these scripts. It could be a line of dialogue; it could be a character; it could be a scene; it could be a plot point, or a sub-plot point, or a set. I don’t care what it is. Let’s just make the list. And I’ll write a new screenplay that incorporates all the things on it.”

Essential offer

Twenty years later, Nick remembers that Harve and Bob couldn’t see how to make his plan work. They had to present ILM with a script within 12 days, or the effects wouldn’t be ready for the movie’s release. That didn’t seem like enough time to write a script; in fact, it wasn’t even enough time to agree to a deal with Nick’s agent. To this day, Nick’s not sure why he said what he did next. He smiles somewhat ruefully at the memory. “I, prompted I don’t know by what, said, ‘Look, forget my deal. Forget the money. Forget the credit. Because if we don’t do this right now, there’s not going to be a movie, and you know that.’”

As a result of that decision, Nick has never been formally credited for his involvement with writing the screenplay for *STAR TREK II*, but Bob Sallin has no doubt that his contribution was absolutely essential. “Nick Meyer’s uncredited rewrite is what we shot. His contributions were enormous; he really synthesized everything, focused it, and brought it together.”

The list that Nick, Harve, and Bob drew up included all the essential elements of the story: Kirk meeting his son, Spock dying, the Genesis Project, Saavik, and, of course,



Nicholas Meyer’s version of the script cast Captain Kirk as a tragic hero, and structured the movie around Spock’s death. The actual elements of the plot were all present in earlier drafts of the script, but Nick made some changes to the order of events.

Khan, who was hell-bent on revenge. Once he had it in front of him, Nick concentrated on crafting a strong narrative by getting all the scenes in the right order, and putting the story into his own words. “I was only interested in cobbling together and cannibalizing various parts that seemed useful,” he says. “What I fell in love with is the story. I never looked at the scripts again, so there were no words that were appropriated. It all had to be in my own language and in a way that I could understand it.”

Nick has some very clear opinions about what makes good drama, and he was determined that, despite the futuristic setting, his film would make sense to a 20th-century audience. “I came to it completely irreverent; the whole idea of treating this thing like some

kind of sacred relic that we were tiptoeing over did not occur to me, and did not interest me. I remember that, when I was walking around my living room, talking to Harve and Bob about what the movie should be, I said, ‘I never quite understand why they don’t really speak English; why do they say ‘Negative’ when they mean ‘No’? Do they ever go to the bathroom? Have books disappeared? Because they haven’t so far. Why can’t Captain Kirk read a book?’ I was just pulling books off my shelf, and the book I pulled off first was ‘A Tale of Two Cities.’ It’s the one book which everybody knows the first and last lines of, so that worked its way in.”

Nick thinks that his approach to *STAR TREK* was very different than Gene Roddenberry’s, but he adds that this isn’t necessarily



Nick says that he made two very important decisions about how to approach STAR TREK. First, he decided that it was basically naval – ‘Hornblower’ in space. Interestingly, this was also one of Gene Roddenberry’s ideas about the series. Second, he decided to embrace the idea that the characters had aged, and he gave Kirk some very human flaws, including imperfect eyesight.

a bad thing. “I believe that art thrives on restrictions. You were in the world created by Gene Roddenberry and his heirs, and you tried to push the envelope on that world, but it was finite. For example, Gene Roddenberry felt that Starfleet was not a military operation, and he believed in the perfectability of man. I do not; there’s no evidence of it in its entire history.”

Having said that, Nick feels that *STAR TREK* responds very well to a variety of creative choices, and this is at least part of the reason for its longevity. “As I became immersed in the world and culture of *STAR TREK*, I thought, ‘Gosh, this thing increasingly reminds me of the Catholic mass!’ The text is immutable; the text is the text. But different composers have set the Catholic mass to music, and it’s what you do with the music that alters its character and gives it variety. To mix metaphors, it’s a question of pouring new wine into old bottles; you’re not going to alter the shape of the bottle.”

Unique contribution

Asked to quantify the character of his approach, Nick produces two examples. The first was that he brought a sense of humor to the project, which is not to say that he didn’t treat it with proper respect. “I think that putting humor into a serious movie makes the serious stuff more serious, and the humor becomes more of an explosive release.”

The other important decision he made was actually something he thought about when Harve and Bob first asked him to direct the movie. “I had the haziest notion of what *STAR TREK* was, because I didn’t really watch the show on television. I finally latched on to the idea that Captain Kirk and friends were really an outer-space version of

a series of novels that I had loved as a kid, by C.S. Forrester, called ‘Captain Horatio Hornblower.’ So I said, ‘OK, this is ‘Hornblower’ in outer space; I’ve got it.’ When I wrote the script in the 12 days it was very, very, very Navy, or, as my late wife used to say, ‘Nautical but nice.’”

Having settled on his approach to the material, Nick concentrated on making the narrative as powerful as possible. This meant structuring the story so that each moment had the maximum impact on the audience. “The point of doing a drama,” he explains, “is to make people laugh or cry, or preferably both. That’s the game.”

Emotional impact

The story he was working with contained one element that was clearly going to be central to the audience’s emotional response. “Once you decide that you’re going to have the death of Spock, then how does that affect the other people? Why is it there? I got a lot of stick from a lot of people from the very beginning about the idea of killing Spock. Somebody said, ‘You can’t kill him.’ And I said, ‘Sure you can; the only question is whether you do it well.’ If his death proceeds organically from the theme and the story of the movie, then nobody’s even going to notice it until it’s on you, and no one will question it.”

In other words, Nick was determined that his script would be *about* something, and would do more than tell an adventure story. “I don’t think that putting the list in the right order by itself provided the theme,” he says. “It’s a question of what you do with the things on the list. I sat back and contemplated it, and tried to find out what it added up to. We were giving birth to planets, and Kirk was meeting his son, and Spock was dying. You sort of

looked at that and said, ‘Well, what unifying ideas are running through here?’ And then you thought, ‘Ah! This is going to be a movie about ...’ This was going to be a story in which Spock died, so it was going to be a story about death, and it was only a short hop, skip, and a jump to realize that it was going to be about old age and friendship. I don’t think that any of those other scripts were about old age, friendship, and death.”

Nick goes on to say that he doesn’t necessarily think he is the best person to talk about the movie’s themes. “There is always a temptation to believe that the artist is going to supply some kind of definitive interpretation. But there is no such thing as ‘definitive’ when it comes to art; the artist ceases to be definitive once the art is finished.”

Developing themes

What he can do is talk about how the themes evolved. He remembers that the basic narrative of the film was very clear at the end of the 12 days, but that the thematic elements became much stronger in the following weeks when he had the chance to refine his work. For example, he says the decision that the movie was about old age and friendship prompted him to include the scene in which McCoy visits Kirk in his apartment and tells him that he should get his command back. With every alteration, the themes were woven tighter and tighter into the script.

Another example of this thematic growth is Spock’s apparent death during the simulator sequence, which is something that Nick explains didn’t feature in his first draft. “At some point, we were talking about how the fans were very concerned that Spock was going to die. I was sitting behind Harve Bennett in a screening room, where we were

Behind the Scenes



Spock's 'death' during the simulator sequence at the beginning of the movie was meant to misdirect the audience and foreshadow his very real death at the end.

looking at, I think, footage that we planned to borrow from the first film. I said to him, 'Why don't we open the movie with the simulator sequence, put Spock in it, and kill him off right up front?' I sort of thought I was being funny, but Harve turned around and said, 'Oh my God; that's great!' Then, of course, it became integral to what the movie was going to be about – the unwinnable scenario."

A hero's flaws

Here, Nick's lack of reverence for the original series played a very important role. In one of the earlier drafts it had been suggested that the *Kobayashi Maru* was a no-win scenario, but Nick now decided that Kirk would basically have solved it by cheating. Harve was initially resistant to the idea that Kirk could do anything 'bad,' but Nick won him over; in fact, to Nick's mind the story needed Kirk to have flaws. "There's a distinction to be made between heroes and gods," he says, "which I think we sometimes get confused about. When I wrote the novel 'The Seven Percent Solution' somebody said, 'You turned Sherlock Holmes into a drug addict; you trashed my hero!' I said, 'Putting aside the fact that he was a drug addict to begin with, let me explain my theory of heroism. If a man jumps into a raging torrent to save a drowning child, he performs an heroic act. If the same man jumps into the same torrent to save the same child, but does so with a ball and chain attached to his leg, he's not less heroic; he's more heroic.'

"If you look at the heroes of antiquity and myth, they all have flaws. It's something that they have to overcome; their flaws are something that they have to act in spite of. The challenge is not to defy your fate, but to

endure it. That is heroic. Oedipus is all of us, because we all have to endure our fate, one way or the other. It's when you start making people invulnerable that they're not interesting any more. If there's no kryptonite, there can be no Superman."

And, in this film, James T. Kirk is very much a classical hero who must confront his own weaknesses. He played god when he left Khan stranded; he chose not to be involved in his son David's life; he allowed the *Enterprise* to be damaged because he wouldn't listen when Saavik told him to raise the shields.



To Nick's mind, Khan was related to Satan, who fell from grace with God. Of course, thematically, this linked him with Genesis – another of the film's Biblical allusions.

When Spock dies, he must endure; and Nick was absolutely conscious of this when he was writing the script.

"The flaw is always the same," he says. "The hero always thinks he knows the answer, and ultimately he learns that he doesn't. I used to teach Elizabethan and Greek theater, and there is always a point in Greek plays, known as 'peripeteia,' where the hero learns that everything he knew is wrong. And it's no accident that in at least two of my movies there comes a point where the hero says, 'I know nothing.' H.G. Wells says it in 'Time After Time'; Kirk says it in *STAR TREK II*. It's when you begin to realize that you know nothing that you're ready to learn something. When you've had the shit kicked out of you, you're ready to start over, and with a little humility. As I was writing it, I was certainly getting to that 'I know nothing' point."

Character depth

Given this approach, it's not surprising that Nick talks about the other characters in terms of how they related to Kirk. "The broad outlines of the characters were certainly there, and you didn't have to be a rocket scientist to see what they were. If Kirk was *Hornblower*, then Spock was his imperturbable first mate; he was like Starbuck in 'Moby Dick' – that cool, dispassionate, resolute ADC. McCoy was the bleeding-heart, liberal humanitarian. That was the trioka. I think Harve Bennett pointed out that Kirk was always attempting to sort of synthesize the extremes of McCoy and Spock."

He admits that he found the other members of the crew "a little two-dimensional" but says that he tried to make the characterizations more specific to give them a little more depth. However, he is quick to say that none of this would have been possible if he hadn't been working with elements that had already been established. "Without the television series, without the Robert Wise movie, I hadn't a clue; I couldn't have gone out and done this from scratch. It's always easier to see what somebody else has done that you can build on, rather than just staring at a blank page."

And, of course, there was another significant element that Nick drew from the original series – his villain, the genetically engineered superman Khan Noonien Singh. He remembers being absolutely delighted when he sat down and watched 'Space Seed.' "They showed me this episode, and I said, 'Aha!' We have an extraordinarily handsome and charismatic, and, it says in the script, brilliant superman, who is abandoned; he



Spock's death was the climax of the movie, and Nick made sure that it had the greatest emotional impact possible. Kirk has literally lost a part of himself.

is Robinson Crusoe-fied on this planet.”

Using the original episode as a building block, Nick built Khan into the ultimate adversary for Kirk. As he worked on his character, he imagined how angry a man would be after being stranded on a desert island and losing his wife. Inevitably, Khan became obsessed with Kirk, whom he saw as his nemesis. “Kirk was the fiend who had imprisoned him; who had stopped him up in the bottle. I think when Khan makes his appearance in the story, Kirk is flabbergasted. He did not lie awake thinking about Khan; Khan lay awake thinking about Kirk.”

Literary origins

And Nick decided that, while Khan had been waiting, like Kirk, he would have been reading. “I started thinking, ‘What books does a superman take with him into exile?’ At one point, Khan says ‘On Earth I was a prince,’ and certainly he’s a fallen angel, so I picked all the books that were Lucifer-related – fallen angel – whether it was ‘Moby Dick’ or ‘Paradise Lost’ or ‘King Lear,’ and began to build from there. I thought, ‘He’s probably been obsessively reading these books again and again until every other word out of his mouth has been written by Shakespeare or Milton.’ Actually, Melville was the one who finally took over; he just becomes completely Ahab.”

Nick describes his original draft as being like the U.S. Constitution, saying that it was amended but that the fundamentals remained the same. He credits Harve with helping him polish it and giving him valuable advice about how *STAR TREK* worked. He adds that the cast were also very helpful, though at one point he was worried that William Shatner was less than pleased. “I was up at ILM in

northern California when I got a phone call from Harve, who said, ‘God, we’ve got a big problem; William Shatner hates the script!’ So, a couple of days later, back in Los Angeles, Bill came in to tell us how awful the script was and that it was a complete disaster. However, when I distilled what he was talking about I was surprised to realize how easy it was to fix the kinds of things he meant. He didn’t want Captain Kirk to look like a fool, he wanted him to look like a leader; he wanted him to reach conclusions before other people. I remember that in my original draft Kirk was 49, and Bill said, ‘Let’s not specify how old he is.’ That was the sort of thing I had to learn.

“In 24 hours I had addressed his remarks,

such that he left a message on my answering tape a few days later, and he said, ‘Oh, you’re a genius; this is brilliant.’ I hung on to that tape and used to play it at him when he gave me a hard time!”

Meaningful death

Inevitably, there was some concern that the script might seem too downbeat, particularly because in Nick’s version there was nothing to suggest that Spock might be reborn on the Genesis Planet. Today, he recognizes that might have been a mistake, but, he explains, he never felt that Spock’s death was depressing.

“My feeling about killing Spock was that it would be moving, but that didn’t mean you would be depressed by it. Romeo and Juliet die, but nobody comes out of that play depressed. We didn’t want Spock’s death to be meaningless. And I don’t think it is. Aristotle had the notion of catharsis – that the audience is purged through pity and terror. You don’t come out of these things saying ‘I’m going to stick my head in the oven.’ Kirk chooses to go on living; sadder but wiser, understanding a little more the way the world works, and that is not, per se, depressing. It may be sad, but it’s not depressing.”

Indeed, it was because he couldn’t see a satisfying way of resurrecting Spock that Nick decided not to return to work on *STAR TREK III*, but he did rejoin the team for the fourth and sixth movies, and he played a vital role in making *STAR TREK* what it is today. ✨



The movie ends with Kirk and company looking out at the Genesis Planet and realizing that they too have been renewed by what has happened.

Paul Winfield

After being captured by Khan, Captain Terrell was forced to become the madman's slave, but he died a brave death rather than kill Kirk. We talk to Paul Winfield about his *STAR TREK II* role as one of Starfleet's tragic heroes.

Paul Winfield played Captain Terrell, commander of the *U.S.S. Reliant NCC-1864*, who, along with Chekov, was captured when the two beamed down to the surface of what they thought was Ceti Alpha VI; under the influence of Khan, the two pulled their phasers on Kirk and his landing party, but Terrell turned his phaser on himself rather than kill the admiral. "People would ask what I was doing in the movie, and I'd say, 'Well, I'm sacrificing my life for Captain Kirk!' I felt deeply immersed in the whole *STAR TREK* thing, and I got to know everybody. And I went to college with Walter Koenig, so that was fun; it's nice to share after all your work and stuff has paid off, and you're either in a hit series or getting regular work. It's something that doesn't happen often."

Officer material

Playing a Starfleet commander wasn't, initially at least, a stretch for Paul. "It was the usual officer thing! You try not to make them all the same, but it's a type that people recognize. Terrell is an action person who takes care of things and shoots guns; all of that stuff." The big moment came, of course, when Terrell killed himself. "I think the great sacrificial suicide thing was the most interesting, and the most human. What would someone have to be like to actually sacrifice their existence for something else? You have to imagine

"I think the great sacrificial suicide thing was the most interesting, and the most human."





Captain Terrell and Lt. Chekov beamed down from the U.S.S. RELIANT NCC-1864 to Ceti Alpha V, where they met Khan.

what would be bigger, more important, to him. It's not just a routine order that he follows; it's a major decision. He's not going to have a life any more after that."

Days of discomfort came when Chekov and Terrell beamed down to what was actually the surface of Ceti Alpha V; the sound stage was converted into a desert using giant fans that blew sand across it. "Oh, that was awful!" Paul remembers. "They put us in spacesuits, which kept the dust and sand out, but no air came in either; they clamp you in and that's it, and you can't see through the mask after a while. We had to climb up these mountains of sand, and I got very claustrophobic; occasionally I had to say, 'Stop; I've got to breathe!' I could only do it for so long, and I wasn't looking forward to it after lunch! I think we did about three or four days, too."

Paul and Walter also shared the experience of the Ceti eels, manufactured at ILM. "That was very effective. I had to fly up to Lucas's laboratory and they actually put a thing in my ear; it was on a string that made it move, and boy, it looked real! I didn't have to act scared."

Starting out

Paul's acting career began in high school. He recalls, "I got hired by John Anson Ford, who owned the Ford Theater in Hollywood and produced a big outdoors spectacle of the life of Christ. I played the demoniac guy who comes screaming nude, basically, from the wilderness. That was my big moment, and it got people's attention, especially since there were rattlesnakes in the bushes!"

Theater roles continued while at college. "It was sort of obligatory that I did 'Othello' – I was able to work at it over the years, and I got it down pretty good! I've done it professionally too; I did it in Atlanta with Richard Dreyfuss, and at the Old Globe Theater in San Diego: a beautiful production. I was also accepted into the Stanford Repertory Theater. At the time I was scheduled to be in 'Ironside' – I was going to be the guy who pushes Raymond Burr around in his wheelchair – but I had a chance to do Chekov and Shakespeare and all kinds of plays that blacks don't usually get offered. My agent couldn't believe that I would turn down a series. But working on the stage stretched me more; it was up to me to enlighten the audience or amuse them or whatever, and that to me was what an actor was supposed to do."

Screen roles

Paul's career has spanned a huge number of TV movies, miniseries and guest spots – including a 1987 appearance in the *STAR TREK: THE NEXT GENERATION* fifth-season episode 'Darmok' – but he has no trouble in naming his favorites. "I played Dr. Martin Luther King Jr. [in the 1978 miniseries, 'King']; that was a stretch, and a great responsibility, and I'm very proud of it. And 'Sounder' is a movie that still works." The film, released in 1972, was a drama about a black Louisiana farming family. "People still tell me that 'Sounder' was the picture that got them interested in black acting. It was a portrait of blacks that wasn't being shown; mostly it was blaxploitation

films that were being done – rat-a-tat-tat, drugs, whores, and action films. And next week I start on 'Sounder' again! ABC is doing it



BIOGRAPHY

Paul Winfield was born and raised in Los Angeles and began to act in high school; he was the first black actor to win the 'Best Actor' category in Southern California's annual Speech and Drama Teachers' Association Drama Festival.

He eventually gained a B.A. degree from U.C.L.A.; afterward, his big break came in the theater and he then won a contract with Columbia Pictures before joining the Stanford Repertory Theater.

While continuing to work on stage, Paul has won many TV and movie roles. These included the TV sitcom 'Julia' opposite Diahann Carroll; his movie debut in 'The Lost Man,' starring Sidney Poitier; 'Brother John,' again with Poitier; 1972's 'Sounder,' for which he received an Academy Award Best Actor nomination; and his favorite role to date, that of civil rights activist Dr. Martin Luther King Jr. in the 1978 miniseries 'King,' for which he received an Emmy nomination for Best Actor. He also starred in the miniseries 'Roots: The Next Generations.' Other movie parts have included the controversial 'White Dog,' 'Presumed Innocent,' 'The Terminator,' 'Cliffhanger,' and 'Mars Attacks!,' and TV guest spots range from 'L.A. Law' and 'STAR TREK: THE NEXT GENERATION' to 'Babylon 5' and 'Touched by an Angel.'

as a movie for TV, and Kevin Hooks, who played the boy, is directing it. So everybody's moved on to the next step, except me; I'm doing the schoolteacher! I can't play the farmer I was 25 years ago."

STAR TREK II's director, Nicholas Meyer, was a great fan of the movie, and had always wanted to work with Paul because of it. Conversely, Paul had been a fan of the original series: "I liked *STAR TREK*; I was a Trekkie, I guess! I liked the characters, and I love space things and imaginative stuff that shows you what other worlds may be like. I also did 'Mars Attacks!' and 'The Terminator' – whenever I have that kind of opportunity I leap at it. And I was pleased with *STAR TREK II*; I thought it was a good, entertaining movie." ★

Even under the influence of the Ceti eel, Terrell retained enough of his personality to refuse to kill Kirk.

STAR TREK II Costumes

Costume designer Robert Fletcher was a veteran of the first *STAR TREK* movie, but for *THE WRATH OF KHAN* he was asked to change absolutely everything to give the movie a much more dynamic and romantic look.

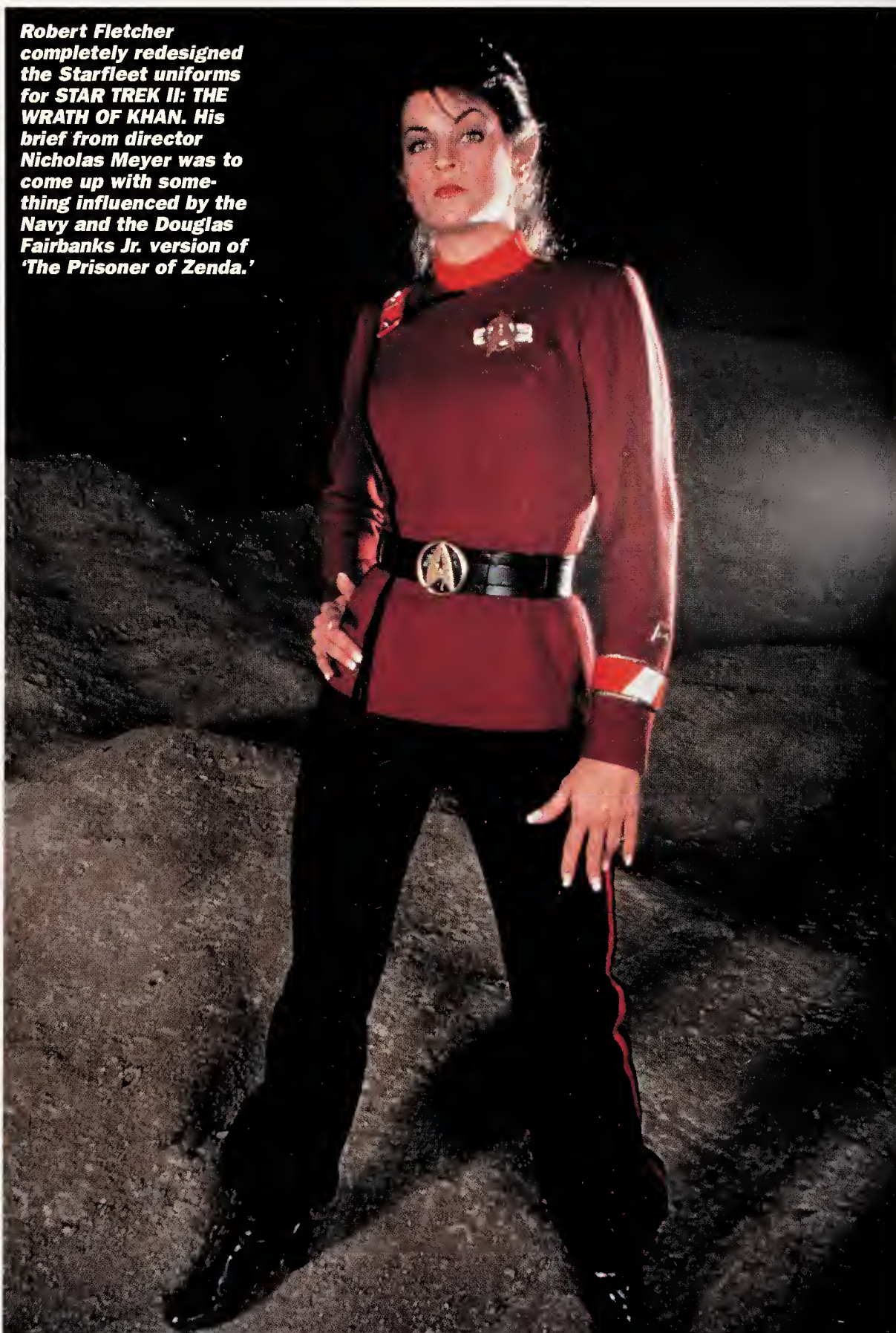
When work started on *STAR TREK II: THE WRATH OF KHAN* everyone was clear about one thing: they hated the Starfleet uniforms that had been designed for the first movie. Even though he had designed them in the first place, this was fine by Robert Fletcher. "I don't blame them," he says. "I didn't like them much myself!" The costumes seemed to sum up everything people thought was wrong with the first movie – for the most part they were formless and lacking in color; in short, they were bland.

Different colors

The producers had already decided to do something about the uniforms before they hired director Nicholas Meyer, but money was tight and producer Robert Sallin remembers sitting down with Fletcher to look at their options. They decided to salvage what they could from the existing costumes by changing the tailoring and the colors. A series of dye tests showed that the old uniforms would take three different colors well: a blue-gray, a gold, and a dark red. The plan was to use the modified uniforms for the junior cadets, and enough money was found to design an entirely new wardrobe for the ship's officers.

When Nick Meyer joined the production, he had some very specific ideas about what he wanted to see in the costumes. "I decided that this was going to be 'Hornblower' in outer space, so I said, 'OK, if this is going to be the Navy, let's have them look like the Navy; they shouldn't be walking around in pajamas,' which seemed to me to be what the uniforms in the first movie and the TV show looked like. When you're dealing with me, I think, you're dealing with a very flat-footed, Earth-bound sensibility, and, if I didn't understand why they were wearing something, then I just wanted to do it in a way that made sense to me." Nick had one other, very significant instruction for Bob Fletcher: he wanted the costumes to be reminiscent of the clothes worn in the Douglas Fairbanks Jr.

Robert Fletcher completely redesigned the Starfleet uniforms for *STAR TREK II: THE WRATH OF KHAN*. His brief from director Nicholas Meyer was to come up with something influenced by the Navy and the Douglas Fairbanks Jr. version of 'The Prisoner of Zenda.'





STAR TREK II was made to a very tight budget, and one of the ways the producers saved money was by dyeing the costumes from the previous movie and adding some detailing. The dye tests showed that the costumes would successfully take several different colors, including crimson, which was adopted for the new officers' uniforms.

movie 'The Prisoner of Zenda.'

As usual, Bob Fletcher began work by producing a series of quick thumbnail sketches. "I've always been used to an almost automatic drawing method," he explains. "I scribble a lot, and out of the scribbles comes the idea. Then I link that visual I've found for myself with other things intellectually and produce a scheme."

Bob was careful not to reproduce any specific naval uniforms and used the dark red color that had been discovered

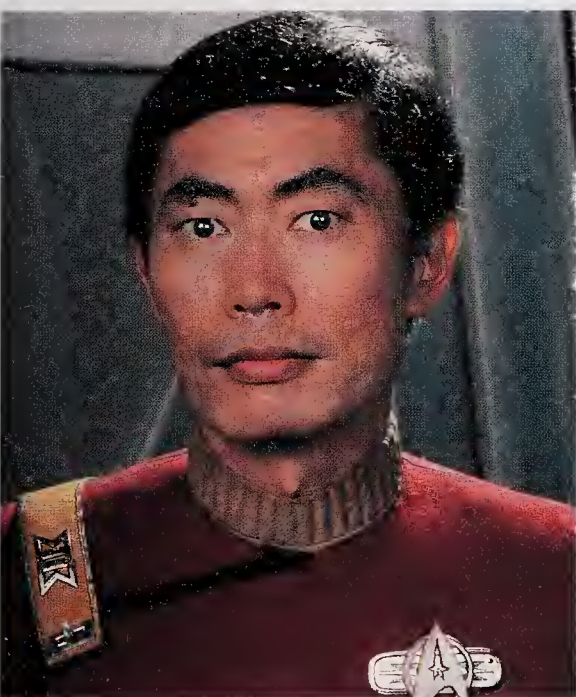
during the dye tests. Nick was keen on this approach, since it made the costumes dramatic and created a strong contrast with the background.

Refining the look

The first versions of the uniform had a stiff black collar like the costumes in 'The Prisoner of Zenda.' Bob Sallin suggested changing this into a turtleneck, and when he made the alterations Bob Fletcher decided to use trapunto, which is a form of vertical quilting.

Nick had always wanted the costumes to feel as much like real uniforms as possible, so he asked for rank insignia. "There was kind of a complicated arrangement of divisions and ranks expressed by the braid on the sleeves," Bob remembers, "I made that up. I organized it and produced a little instruction booklet about it for the wardrobe department and anyone else who was interested."

On the early version of the uniform, the insignia were on a band around the upper



The departmental colors were preserved on the undershirts and on the rank insignia on the shoulder, although Bob Fletcher assigned new colors to each department.



In order to keep things interesting, Bob Fletcher came up with several variations of the uniform, including the field jacket and vest that Kirk wore.

Behind the Scenes



Showing off Ricardo Montalban's physique was a major concern, so his costume was designed to expose as much of his chest and arms as possible.

arm, which was now moved to the cuff. The last major change was to redesign the flap of the double-breasted jacket so that it would actually open. This was something Nick wanted, because he felt the lighter color on the inside of the flap would frame the actors' faces better.

Invisible fixings

However, the flaps presented Bob Fletcher with a slight problem: when the flap was open you could clearly see the snaps that held it in place, and, as he says, these looked distinctly unfuturistic. "In order to make it look less like plain old snaps, I found this sterling silver chain that looked strange. I ordered a reel of it and sewed it in with the snaps to give it a feeling that it was perhaps a magnetic closing."

Bob then designed several variations of the uniform, most of which were worn by Kirk and not by the other characters. "It's normal in any kind of military organization that you



Bob Fletcher's idea for Khan's followers was that they literally had to dress themselves with items they could salvage from the BOTANY BAY, including upholstery fabrics and cabling that they had pulled out of the ship.

don't have just one uniform; you have uniforms for specific tasks and specific times of day – formal, informal, combat, and so on. Kirk is the lead, so he goes through the most variations. When it seemed appropriate, he had a change."

For Khan and his followers, Bob wanted to create a definite contrast with the highly

organized Starfleet uniforms. As he explains, his idea was that their costumes were made out of whatever they could find. "My intention with Khan was to express the fact that they had been marooned on that planet with no technical infrastructure, so they had to cannibalize from the spaceship whatever they used or wore. Therefore I tried to make



Bob Fletcher says the major concern with the scientists' outfits was to make sure that they were different than the Starfleet uniforms and civilian clothing, and at the same time suggested a futuristic lab coat.

it look as if they had dressed themselves out of pieces of upholstery and electrical equipment that composed the ship."

He adds that when it came to Khan's costume there was another major consideration. "We wanted to show Ricardo Montalban's physique. He was rather proud of it, as he should have been. That was a theatrical gesture."

Of course, when Khan first appears he is dressed from head to foot in rags. Again, Bob says, the design of this costume was dictated by Khan's situation. "They had to protect themselves from the planet, which was very inhospitable. That was the origin for the kind of Bedouin look. If you have nothing else, and you have access to some fabric you may have ripped out of a bedroom or whatever, then you wrap yourself up to protect yourself from the sandstorm."

Something different

For the remaining costumes, Bob's biggest concern was to create a sense of contrast with the major outfits. Carol Marcus and her team were given white smocks that suggested futuristic lab coats, and in the scene where Kirk and McCoy were dressed in civilian clothes Bob tried his best to make sure the outfits looked practical and comfortable.

Amusingly, Bob says the one costume that he gets asked about most makes only a fleeting appearance in the movie. When

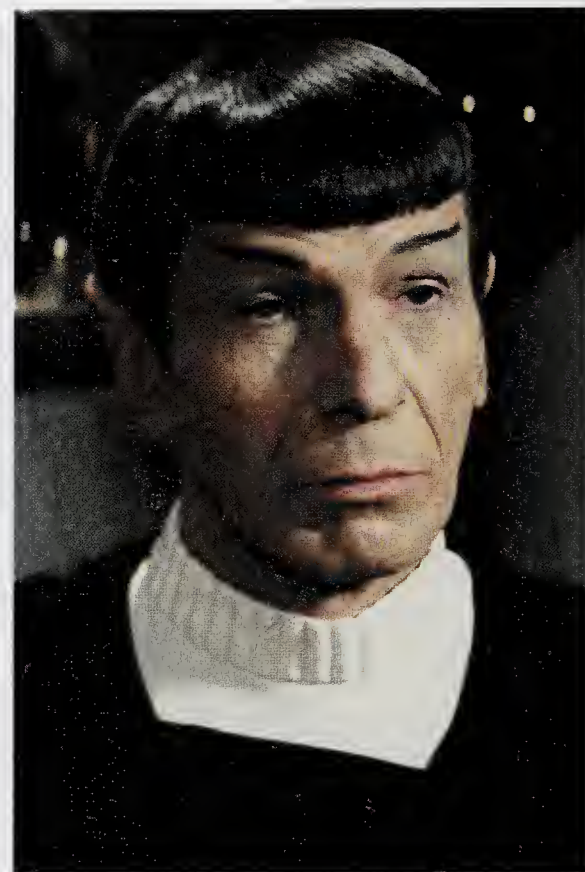
Kirk visits Spock in his quarters, the Vulcan is wearing the same robes he wore in the previous movie. "People always ask me what the writings on the front of Spock's black velvet, at-home costume symbolize. I have to explain the language that I invented to decorate those things, and I can't! All I can say is that it's very much akin to Chinese; it's non-syllabic, and the various shapes contain an entire thought and you don't use them to make words."

Deco style

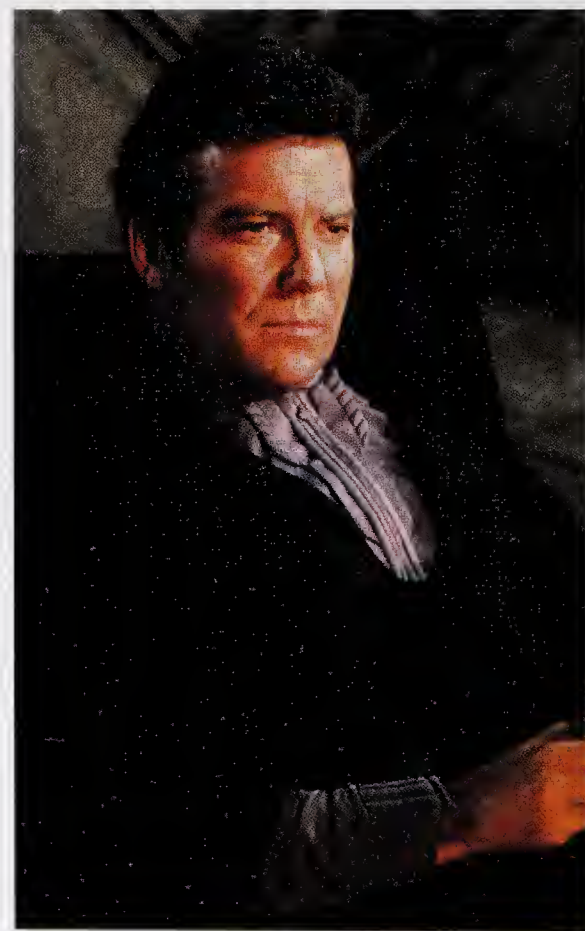
He adds that most of the costumes feature what he describes as "corrupt" colors. "Technically, they are colors that are a little bit tinged with their complements," he explains. "Probably the closest thing in art history is art deco colors. I once did a production of Offenbach's 'Voyage to the Moon,' and I based that on the fact that the moon probably looked like an art deco world. Maybe that stuck in my mind, because I used those colors here."

He adds that because these colors aren't quite true, there is something slightly odd about them, which gives the audience the feeling they are from a different world.

Bob Fletcher's work on this movie helped redefine the way that world looked, and his new Starfleet uniforms remained in use until the original cast retired, becoming as much a part of the *STAR TREK* universe as William Ware Theiss's original versions. ★



The robes that Spock meditated in were the same ones he was wearing when he arrived on the bridge in *STAR TREK: THE MOTION PICTURE*.



The civilian clothes worn by Kirk and Spock were among the hardest things Bob had to design. As he says, you are always wrong about the future.

A Guide to Sickness

Although many of the illnesses that have beleaguered humanity in the past were eliminated by the 23rd and 24th centuries, the wave of future exploration has brought new challenges to the medical profession.

Starfleet personnel traverse vast distances in their pursuit of new discoveries, some benign and fascinating, others more sinister and potentially lethal. Starfleet Academy training can prepare an officer to confront the unknown with confidence, but there is little that can be done to prevent the exposure of personnel to alien infections. These conditions vary in the magnitude of their effects, ranging from the slightly inconvenient – the alien equivalent of a cold – to the lethal, such as the Delta Quadrant disease that almost

wiped out the Vidiians, known simply as the Phage.

Increased risk

One thing is for sure, however; as long as the United Federation of Planets welcomes more races into its fold and its officers continue to explore the unknown and uncharted, sickbay will never be empty, and skilled physicians will always be called upon.

In 2266 Captain Kirk succumbed to a synthetic virus, which was originally designed to increase the human lifespan but proved lethal to adults who were exposed to it.



Anchilles fever

A contagious disease capable of causing deaths numbering in the millions. It struck the planet Styris IV in 2364, and the cure could not be readily synthesized.

STARSHIP LOG:
'Code of Honor' (TNG)

Fortunately for the inhabitants of Styris IV, Captain Jean-Luc Picard was successful in obtaining the cure for Anchilles Fever.



In 2364 Lutan of the Ligonians agreed to provide an antidote to the Anchilles fever.



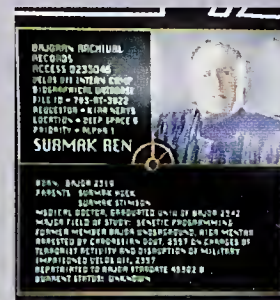
Aphasia virus

An artificial virus created by the Bajoran underground in 2351 during the Cardassian hostilities, which spread throughout *Deep Space Nine*. Intended to be used against the Cardassian occupiers, the device carrying the virus lay dormant until 2369, when it accidentally infected Bajoran and Federation personnel, leaving each sufferer unable to communicate in a coherent manner. Aphasia was only the initial symptom, and as the sickness progressed the sufferer eventually slipped into a coma and died.

STARSHIP LOG: 'Babel' (DS9)



Chief Miles O'Brien was one of the first crew personnel to be infected by the aphasia virus.



Dekon Elig was responsible for creating the aphasia virus.



Andronesian encephalitis

An unpleasant, but not life-threatening, disease transmitted by airborne particles that is common in Federation space due to the transmission of the particles via space travel. The disease was easily treated and was regarded as a minor condition by 2365.

STARSHIP LOG: 'The Dauphin' (TNG)



Arethian flu

A common viral disease. On Stardate 48579, the U.S.S. *Voyager* NCC-74656's Emergency Medical Hologram suspected that Lt. Hargrove might have Arethian flu.

STARSHIP LOG: 'Eye of the Needle' (VOY)

The Doctor was about to test for Arethian flu when he was deactivated in 2371.

Ba'ltmasor syndrome

A degenerative disease that is endemic to the Klingon species. The condition is treatable with a course of regular injections, which prevents the symptoms from escalating.

STARSHIP LOG: 'The Drumhead' (TNG)

In 2367 the exobiologist J'Dan was assigned to the U.S.S. *ENTERPRISE* NCC-1701-D as part of the Officer Exchange Program and he was found to be suffering from Ba'ltmasor syndrome.



A mutated T-cell from Lt. Reginald Barclay developed into an invasive virus. His DNA was resequenced, and arachnid introns were activated by the condition.

The amniotic fluid surrounding Nurse Alyssa Ogawa's unborn child provided the cure for Barclay's Protomorphosis Syndrome.



Barclay's Protomorphosis Syndrome

An intron virus that caused numerous humanoid, and several animal, species to experience structural and behavioral changes characteristic of forms from earlier stages in their evolutionary development. Accidentally developed when a routine synthetic T-cell treatment became mutated, the virus worked by invading the host's DNA, and activating introns – the portions of an individual's genetic code that are normally dormant, and which contain holdovers from previous evolutionary stages. Named for the U.S.S. *Enterprise* NCC-1701-D's Lt. Reginald Barclay, the first individual known to contract the virus, Barclay's Protomorphosis Syndrome came close to incapacitating the entire crew of the *Enterprise* in 2370.

STARSHIP LOG: 'Genesis' (TNG)

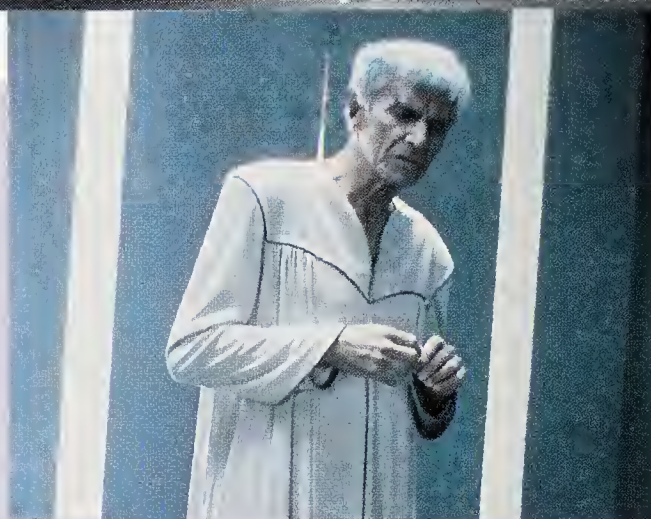
Lt. Commander Worf devolved into a primitive and aggressive beast, with a tough exoskeleton and a strong desire to seek a mate.



Briefing: A Guide to Sickness

Bendii Syndrome

A degenerative illness affecting a minority of elderly Vulcans. Initially it is characterized by a gradual but accelerating loss of emotional control, with victims exhibiting sudden bursts of emotion. Diagnosis is made by culturing tissue samples taken from the patient's metathalamus. A dangerous side effect of Bendii Syndrome is that the loss of



The increasingly debilitating effects of Bendii Syndrome left Ambassador Sarek a shadow of his former self.

emotional control can be telepathically projected to others. Vulcans are able to resist the emotional projections, but if the afflicted person is in the presence of non-Vulcans the emotions can cause outbreaks of violence. Ambassador Sarek was afflicted with Bendii Syndrome at the age of 202, and his struggle with the condition ended in 2368, when he died.

STARSHIP LOG: 'Sarek' (TNG)



Lt. B'Elanna Torres was forcibly infected with blood fever in 2373.

Blood fever

A neurochemical imbalance caused by the Vulcan Pon farr mating drive. The Vulcan telepathic mating bond, particularly if used on a non-Vulcan, causes potentially fatal hormonal changes, which have devastating physiological effects. The only two outlets that alleviate the blood fever are those offered by the ancient Koon-ut-kal-if-fee – marriage or challenge – ritual. The victim must either complete the mating bond, or engage in potentially lethal combat.

STARSHIP LOG: 'Blood Fever' (VOY)



Lt. Commander Tuvok guided Ensign Vorik through the Pon farr in 2373.

Dermal dysplasia

A skin disorder caused by an overexposure of the victim's epidermis to hazardous levels of thermal and ultraviolet radiation, usually from the local sun.

STARSHIP LOG: 'Future's End, Part I' (VOY)



Following the trail of a stolen time-ship, Lt. Tom Paris and Lt. Tuvok adopted 20th-century disguises, but Tuvok refused to become too exposed to the sun for fear of developing dermal dysplasia.

Chromo-viral disease

A chromo-viral disease is easily transmitted and passes through several increasingly critical stages; it can be treated successfully with cytoglobin injections.

STARSHIP LOG: 'Critical Care' (VOY)



The EMH needed cytoglobin to treat a Dinaal patient's chromo-viral disease.

The Doctor infected Chellick with the chromo-viral disease to argue his case in 2377.

Dorek syndrome

A rare and untreatable terminal disease that afflicts one out of every five million Ferengi. By the time it is diagnosed, the sufferer has on average only six or seven days to live, although they do retain their full capabilities until the last moments of the disease's progress.

STARSHIP LOG: 'Body Parts' (DS9)

In 2372 Quark was mis-diagnosed with Dorek syndrome during his insurance physical.



Hemocythemia

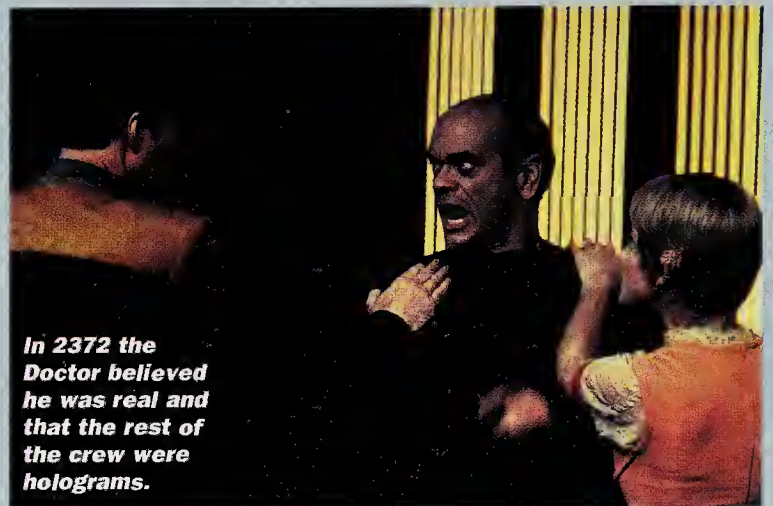
A medical condition which results in the intercellular pressures of its host becoming unstable. The illness was also referred to as hemocythemic imbalance. There is a prescribed treatment for the condition, which is effective in all but the very extreme cases, and that is through the application of osmotic pressure therapy.

STARSHIP LOG: 'Deadlock' (VOY)

Holotransference Dementia Syndrome

A psychological disturbance in which an individual becomes so disoriented within a holographic scenario that they lose sense of their own true identity and start to believe that they are part of the program.

STARSHIP LOG: 'Projections' (VOY)



In 2372 the Doctor believed he was real and that the rest of the crew were holograms.

Hesperan thumping cough

A flu-like affliction contracted via an airborne virus, one symptom of which is severe respiratory distress. This illness resembles the whooping cough of 20th-century Earth, and is marked by a convulsive spasmodic cough.

STARSHIP LOG: 'Angel One' (TNG)

Irumodic Syndrome

Degenerative neurological disorder that causes deterioration of the synaptic pathways. The condition causes confusion, delusions, and eventually death. The treatment of choice in 2370 was peridaxon, though this only relieved the symptoms. Genetic testing determines if a person may develop Irumodic Syndrome in later life, but not all persons who test positive develop the condition.

STARSHIP LOG: 'All Good Things...' (TNG)



Captain Picard was diagnosed with Irumodic Syndrome in an anti-time future.

Iverson's disease

A chronic and progressive muscular disorder that causes fatal degeneration of motor skills in humans, but does not impair mental faculties. There is no known cure for this disease.

STARSHIP LOG: 'Too Short a Season' (TNG)

Iresine Syndrome

A very rare neurological disorder in humanoids, characterized by a peculiar electropathic signature in the thalamus and a severely decreased histamine count; sufferers fall into a coma of a duration of approximately 72 hours. This disorder was first identified in the 23rd century.

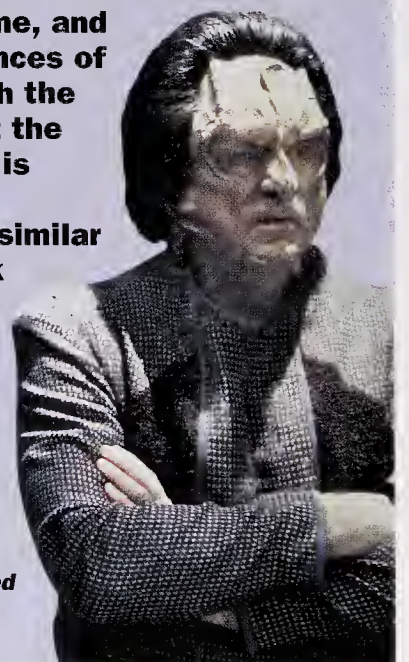
STARSHIP LOG: 'Violations' (TNG)

Kalla-Nohra Syndrome

A chronic pulmonary disease with a unique pathology. This syndrome is only found among survivors of a mining accident at Gallitep, a forced labor camp run by the Cardassians during their occupation of Bajor. All known survivors of Gallitep have the syndrome, and there are no recorded instances of anyone being diagnosed with the disease unless they were at the camp. Palliative medication is effective in alleviating the symptoms. The condition is similar to the less-damaging Pottrik Syndrome; an effective differential diagnosis between the two conditions is a lower respiratory probe, which gives a positive result for Kalla-Nohra.

STARSHIP LOG: 'Duet' (DS9)

In 2369 Aamin Marritza was suspected of having a condition that only those at Gallitep could possibly contract.



Briefing: A Guide to Sickness

Levodian flu

A minor viral disease which lasts 29 hours. Symptoms include a runny nose and persistent sneezing. Levodian flu is generally regarded as an annoyance rather than a medical emergency.

STARSHIP LOG: 'Tattoo' (VOY)

In order to improve his understanding of his patients, the Doctor programmed himself to experience Levodian flu.



Mendakan pox

A disease in humanoids characterized by an otherwise harmless skin mottling.

STARSHIP LOG:

'Favorite Son' (VOY)

In 2373 Ensign Kim feared he may have contracted Mendakan pox.



Memory virus

A parasitic organism, possessed of some degree of intelligence, that survives on the peptides generated by its host's brain. The virus evades the body's immune system by disguising itself as a memory engram, creating a false memory for its host that is so traumatic that the host's psyche represses it. In host after host, the virus survives by hiding in a part of the host's mind that the subconscious would want to avoid at all costs. When it senses the death of the host, it implants itself in another victim. Thoron radiation proves fatal to this organism.

STARSHIP LOG: 'Flashback' (VOY)



Lt. Tuvok was diagnosed with the memory virus in 2373; only a mind-meld with Captain Janeway could prevent damage.



The Founder leader was infected with the morphogenic virus and struggled to find a cure.

If the morphogenic matrix of a shapeshifter is destabilized, the life of the being is imperiled.

Morphogenic virus

An artificially-generated virus created by the covert Federation organization Section 31 to inhibit the Founders from changing shape during the latter part of the Dominion war in 2375.

STARSHIP LOG:

'When it Rains' (DS9)



The Nehret

The Nehret is a virus that lies dormant, disguising itself as inert genetic material until it inexplicably activates. In 2377 the Nehret was eradicated using stem cells from the mixed-heritage baby belonging to Lt. Tom Paris and B'Elanna Torres.

STARSHIP LOG:

'Prophecy' (VOY)



In 2377 T'Pol was informed by the Doctor that he was as healthy as a targ – a cure for the Nehret had been discovered.

B'Elanna Torres's child proved to be the prophesied Kuvah'Magh, and was the savior to a generation of Klingon refugees.

Orkett's disease

A viral malady that swept through the Bajoran work camps during the Cardassian occupation, killing thousands of Bajoran children.

STARSHIP LOG: 'State of Flux' (VOY)

Seska claimed to have Orkett's disease to continue her subterfuge aboard VOYAGER.



Phyrox plague

A particularly virulent disease that swept the planet Cor Caroli V in 2366. Starfleet Command classified the outbreak as secret after intervention by the *U.S.S. Enterprise NCC-1701-D* contained the virus.

STARSHIP LOG: 'Allegiance' (TNG)

Plasma plague

A family of lethal virus types, one of which threatened the heavily populated Rachelis system in 2365. The plasma plague viruses were known for almost a century prior to 2365, and pioneering research was conducted by Dr. Susan Nuress

in 2295 following an epidemic on the planet Obi VI. One mutated strain, developed during Nuress's explorations, was discovered to grow more rapidly when exposed to eichner radiation. A similar strain threatened the *U.S.S. Enterprise NCC-1701-D*, when the ship was transporting specimens of plasma plague to science station Tango Sierra to combat the Rachelis system contagion.

STARSHIP LOG: 'The Child' (TNG)



A special confinement system was used to convey the deadly plasma plague to the Rachelis system.

Pottrik Syndrome

A disorder similar to Kalla-Nohra Syndrome that is treated using the same medication. A bio-probe can be used to distinguish between the similar conditions.

STARSHIP LOG: 'Duet' (DS9)

Phage

Without a doubt, one of the most virulent contagions discovered by Federation personnel was the phage; a deadly virus that attacked members of the Vidiian race in the Delta Quadrant. The phage literally consumed the Vidiians; their genetic code was first disrupted, then

their body tissues were consumed. One of the early symptoms of the disease was excruciating joint pain. Some victims had been known to die simply from the agony itself, and euthanasia of afflicted persons was common. The Vidiians survived in the short term by making extensive use of transplantation and organ piracy, using a variant of transporter technology to literally steal healthy organs from the bodies of their owners. Increasingly desperate, the Vidiians resorted to kidnapping members of other species and experimenting on them. A Vidiian scientist, Sulan, believed that research into Klingon genetic material would eventually lead to a cure. Whether this line of investigation would have been successful became moot when it was revealed that the coalition known as the 'think tank' had devised a cure for the phage. Now cured of the disease that had been ravaging their society for so long, the Vidiians had to face the consequences of the actions they took in their desperate struggle, which cost the lives of so many innocents.

STARSHIP LOG: 'Phage' (VOY)



The phage literally consumed its victims layer by layer. To counter this, the Vidiians devised a short-term treatment that involved harvesting organs from other races.

Psi 2000 virus

A water-based organism originally found on planet Psi 2000 in 2266. The virus infected members of the Federation science team stationed on that planet, causing them to exhibit irrational behavior that eventually led to their deaths. Transmitted through contact in humanoid perspiration, the virus later affected members of the *U.S.S. Enterprise NCC-1701* crew, resulting in the near-destruction of the ship. An antidote was found, but a similar virus that was carried by airborne particles infected members of the *U.S.S. Tsiolkovsky NCC-53911* and the *U.S.S. Enterprise NCC-1701-D* in 2364.

STARSHIP LOG:

'The Naked Time' (TOS) & 'The Naked Now' (TNG)

Briefing: A Guide to Sickness

Rigelian fever

A lethal disease resembling the bubonic plague – as seen on Earth – in its effects. The only known antidote, ryetalyn, is extremely rare and difficult to chemically synthesize.

STARSHIP LOG:

'Requiem for Methuselah' (TOS)

In 2269 Captain Kirk led a landing party to the planetoid Holberg 917G in search of ryetalyn.



Radiation from the probe Friendship 1 caused mutations to the population of a Delta Quadrant world.

Radiation disease

Radiation disease was initially caused by the unwitting tampering of an antimatter core on a Delta Quadrant world; a nuclear winter that lasted decades ensued. Sufferers endured horrific skin complaints as a result of exposure to the radiation, but all conditions were treatable.

STARSHIP LOG: 'Friendship One' (VOY)



Rigelian Kassaba fever

A disease treated with stokaline injections, presumably less virulent than standard Rigelian fever.

STARSHIP LOG: 'By Any Other Name' (TOS)

Dr. McCoy claimed that Spock needed treatment for Rigelian Kassaba fever, in a ruse designed to regain control of the ENTERPRISE.

Rudellian brain fever

A cerebral infection prevalent on Bajor and in other worlds formerly administered by Cardassia.

STARSHIP LOG:

'The Assignment' (DS9)

Chief Miles O'Brien feared that Keiko's strange behavior could be ascribed to a brain fever, but a Pah-wraith possession was the reason.



Rop'ngor

A juvenile Klingon disease that results in skin eruptions and malaise similar in effect to Terran measles. Very rarely seen in adult Klingons, unless they are in poor physical condition, and considered a very embarrassing affliction in adulthood.

STARSHIP LOG:

'Up the Long Ladder' (TNG)



Worf was embarrassed when he developed rop'ngor. In 2365 Dr. Pulaski treated the condition confidentially, and he rewarded her by inviting her to a Klingon tea ceremony.

Rugalan fever

A deadly disease prevalent on the Trill homeworld. Those who survive the illness are severely incapacitated for a number of weeks.

STARSHIP LOG: 'Nor the Battle to the Strong' (DS9)



Sisko learned that Audrid Dax was hospitalized due to Rugalan fever.

Rudellian plague

A virulent illness that swept through a Cardassian colony on the planet Pentath III in 2372.

STARSHIP LOG: 'Rules of Engagement' (DS9)

Rushton infection

A lethal disease that was still prevalent, and sudden in its effects, in 2361.

STARSHIP LOG: 'The Bonding' (TNG)

Rushton infection killed Jeremy Aster's father in 2361.



Sakuro's disease

An extremely rare but dangerous condition that can cause fever, weakness, and, ultimately, death if left untreated.

STARSHIP LOG: 'Metamorphosis' (TOS)

Commissioner Nancy Hedford suffered from Sakuro's disease in 2267, and the condition prevented her from mediating on Epsilon Canaris III.



Symbalene blood burn

A virulent contagion that could, if unchecked, kill an entire planetary population within an extremely short space of time.

STARSHIP LOG: 'The Changeling' (TOS)

Tarkalean flu

Tarkalean flu is a non-life-threatening ailment that is manifested with fever, respiratory distress, and tremors, but lasts only a few days.

STARSHIP LOG: 'Body and Soul' (VOY)

Tellurian plague

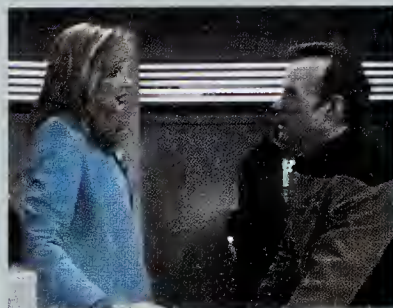
A virulent and lethal infection that was still prevalent, and incurable, in the 2360's.

STARSHIP LOG: 'A Matter of Time' (TNG)

Terellian Death Syndrome

An extremely unpleasant condition relating to cellular decay, which, despite its sinister name, can easily be reversed if diagnosed early enough. Symptoms include dizziness, blurred vision, cardiac palpitations, and a stinging sensation in the lower spine.

STARSHIP LOG: 'Genesis' (TNG)



In 2370 the hypochondriacal Reginald Barclay believed he possessed all of the symptoms of Terellian Death Syndrome.

Synthococcus novae

A dangerous but treatable contagion, which was a bacillus-strain side effect of modern technology. It was regarded as a serious health hazard, with sufferers being required to notify their status to the authorities. Rare individuals carry the disease in dormant form, infecting others while being immune themselves.

STARSHIP LOG: 'The Way To Eden' (TOS)



Dr. Sevrin was a carrier of Synthococcus novae in 2269, but was immune to the disease himself.

Teplan blight

A viral disease endemic to the population of a planet located in the Teplan system. The disease was brought to the planet by the Jem'Hadar as punishment for not accepting Dominion control. The blight was congenital, present in each individual at birth and characterized by lesions that are blue at birth, but redden upon death. In 2372, the Starfleet physician Dr. Julian



Teplan blight manifested as a series of lesions on the skin of the victim.

Bashir, though unable to cure the mature form of the disease, was able to devise a vaccine that eradicated the blight from unborn children, insuring future generations were disease-free.

STARSHIP LOG: 'The Quickening' (DS9)

Briefing: A Guide to Sickness

Terrellian plague

A particularly virulent disease which, in the anti-time universe created by Q, became virtually out of control in 2395. Following an outbreak on Romulus, the Klingon Empire allowed medical ships to cross the border of the Neutral Zone to offer aid.

STARSHIP LOG: 'All Good Things...' (TNG)



Medical ships such as the U.S.S. PASTEUR NCC-58925 were permitted entry into the Neutral Zone to provide treatment for Terrellian plague sufferers in an anti-time universe.

Terra Nova radiation sickness

The inhabitants of mankind's first deep space colony, Terra Nova, were subjected to lethal forms of radiation after an asteroid ploughed into their planet. The resulting shockwave from the impact formed a radioactive cloud that poisoned the atmosphere of the northern hemisphere for 70 years. The Novans fled underground, but suffered from radiation sickness, and various cancers soon became prevalent. The Novans had to abandon their subterranean homes when a beresium isotope contaminant entered the ground water supply and caused them to suffer from micro-cellular decay. The Novans were relocated to the southern hemisphere, where they were finally safe from the effects of the "poison rain."

STARSHIP LOG: 'Terra Nova' (ENT)

Thelusian flu

A virus causing minor respiratory distress, endured by the first officer of the U.S.S. Lantree NCC-1837.

STARSHIP LOG: 'Unnatural Selection' (TNG)

Tetracyanate poisoning



A landing party from ENTERPRISE NX-01 detected neutrino emissions emanating from the planet surface in 2151. Their subsequent investigations revealed a covert mining operation that was poisoning the inhabitants, who displayed signs of sickness.

In 2151 the inhabitants of an Akaali city were being poisoned by a covert and illegal mining operation for veridium isotopes. An industrial lubricant, Tetracyanate 622, which was used in the mining process, had leaked into the area's water supply, consequently infecting the local population. The isotope caused lesions and mottled the skin of the infected, and if not treated usually proved fatal.

STARSHIP LOG: 'Civilization' (ENT)

Transporter psychosis

This rare medical disorder was caused by a breakdown of neurochemical molecules during transport, affecting the body's motor functions as well as the autonomic systems and the higher brain functions. Frequent early symptoms were sleeplessness, tachycardia, muscular spasms, myopia, and dehydration. More acute cases manifested paranoia, hallucinations, delusions, and psychogenic hysteria, and, in extreme cases, multi-infarct dementia caused by dead zones in the cerebral tissues. First diagnosed in 2209 by researchers on Delinia II, the problem resulted from an imperfect understanding of the effects of transporter technology on humanoid physiology, and was eliminated in 2319 with the development of the multiplex pattern buffer.



STARSHIP LOG: 'Realm of Fear' (TNG)

Lt. Barclay was convinced that he had developed the symptoms of transporter psychosis in 2369.

Tropolisine-induced psychosis

An exploratory landing party sent from *Enterprise NX-01* to a Minshara-class world were exposed to a pollen, which contained a psychotropic agent named Tropolisine. Those infected suffered anxiety and paranoia, and were subject to intense hallucinations. Dr. Phlox's analysis of the compound revealed that it contained a stray neutron, which, when broken down, released a toxin that could prove fatal if not treated with inaprovaine. Ensign Novakovich was almost killed after his exposure to the alien pollen.

STARSHIP LOG: 'Strange New World' (ENT)



Novakovich suffered the effects of being contaminated by the pollen.

Urodelean flu

This mild affliction has symptoms that include an imbalance in the K-3 cell count, increased intravascular pressure, and heightened electrophoretic activity. A common treatment is to prescribe a synthetic T-cell to encourage the body to fight the infection naturally.

STARSHIP LOG: 'Genesis' (TNG)

Xenopolycythemia

A disease resulting in a proliferation of red blood cells. Prior to 2268, xenopolycythemia was fatal, but information gathered from *Yonada* provided a cure.

STARSHIP LOG: 'For the World is Hollow and I Have Touched the Sky' (TOS)

Zanthi fever

This viral condition affects older Betazoids. A slightly elevated temperature and occasional dizziness are the only physical symptoms, but the empathic abilities of Betazoids mean that the sufferer can project his or her feelings onto other persons in their vicinity, causing uninhibited and embarrassing behavior.

STARSHIP LOG: 'Fascination' (DS9)



In 2371 Lwaxana Troi projected her amorous feelings onto the crew of DEEP SPACE NINE.

Valakian epidemic

The crew of *Enterprise NX-01* were called to the aid of the Valakians, who had been suffering from a genetic disease that had claimed over 12 million lives. The skills of Dr. Phlox were employed to find a treatment for the condition, and he soon discovered that the drug Priaxate could relieve many of the symptoms. The doctor learned that the disease was part of the evolutionary process of the planet and he found a cure, but still had reservations about implementing the treatment. His ethical promptings convinced the captain that they could not play God, and the Valakians were offered short-term palliative care but were denied the cure they craved.

STARSHIP LOG: 'Dear Doctor' (ENT)

Vegan choriomeningitis

In 2268 the virtually immortal population of the planet Gideon deliberately infected volunteers from their population with Vegan choriomeningitis in order to introduce death back into their critically overpopulated and germ-free society.

STARSHIP LOG: 'The Mark of Gideon' (TOS)

Unnamed microbes

An infection contracted by Commander William T. Riker of the *U.S.S. Enterprise NCC-1701-D*. Developed through contact with a poisonous plant on Surata IV, the microbes spread rapidly throughout the victim's



Riker's endorphins were stimulated to purge his ailment.

system, and, on reaching the brain, cause death. Dr. Katherine Pulaski discovered that the microbes were sensitive to endorphins, and used tricordrazine to stimulate Riker's neural activity.

STARSHIP LOG: 'Shades of Gray' (TNG)

Briefing: A Guide to Sickness

Miscellaneous Unclassified Diseases

The culmination of years of research on a life prolongation project, this virus was designed to extend the lifespans of its subjects, but an unforeseen side effect made it lethal to adults. Children below the age of puberty had their lives vastly extended by the virus, but the onset of puberty brought with it an agonizing death. An antidote for the virus was developed by personnel from the *U.S.S. Enterprise NCC-1701* in 2266.

STARSHIP LOG: 'Miri' (TOS)



The disease activated when its host reached puberty, and brought about a painful death.

A previously unknown, but ultimately fatal, disease with which Ensign Harry Kim and B'Elanna Torres became infected while on the homeworld of the Ocampa shortly after Stardate 48315.6. The *U.S.S. Voyager NCC-74656*'s EMH devised a cure.

STARSHIP LOG: 'Caretaker' (VOY)

A hyperaccelerated-aging disease caused the death of six members of an experimental colony on Gamma Hydra IV. The disease later caused members of a landing party from the *U.S.S. Enterprise NCC-1701* to age rapidly. The only member to not succumb to the illness was Ensign Chekov, whose reaction to seeing a dead colonist provided the solution – adrenaline was the key component in formulating a cure.

STARSHIP LOG: 'The Deadly Years' (TOS)

A synthetic virus devised as a tool of assassination by the Tralesta clan of the Acamarion people. The microbes used in the process were genetically engineered to inhibit autonomic bodily functions in individuals with a specific DNA sequence, such as those belonging to Acamar III's Lornak clan – enemies of the Tralesta.

STARSHIP LOG: 'The Vengeance Factor' (TNG)

Several students were infected with a virus after a trip to Quazulu VIII in 2364. The condition was transferred to the *U.S.S. Enterprise NCC-1701-D* and caused severe respiratory distress to many members of the crew. The condition was cured by Dr. Beverly Crusher.

STARSHIP LOG: 'Angel One' (TNG)



In 2372 Captain Kathryn Janeway and Commander Chakotay were forced to relocate to the planet dubbed New Earth after they were contaminated by an unidentified illness.

New Earth of the Delta Quadrant has an insect which passes on an unidentified disease through its bite. The planet's atmosphere protects against the virus, but if those infected leave the environment of the planet they will die. Fortunately the Vidiians possessed a cure.

STARSHIP LOG: 'Resolutions' (VOY)



In an alternate timeline, without the fal-tor-voh Tuvok's condition proceeded on its grim course to the point of being irreversible.

A degenerative neurological disorder in Vulcans that causes the sufferer to experience an increasing inability to concentrate and cogitate logically. The symptoms can be temporarily allayed with medication, but the only cure is a mind-meld with a biological relation in the early stages. The prognosis for the condition is bleak; if left untreated dementia can ensue.

STARSHIP LOG: 'Endgame' (VOY)

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Interviews: Nicole deBoer, John de Lancie, Joe Longo
Features: Creating *STAR TREK: DEEP SPACE NINE* (Part 1), *STAR TREK: INSURRECTION* Concept Art (Part 3), Designing the U.S.S. *Defiant* NX-74205, *STAR TREK* Encyclopedias

Ref: STM004

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Ref: STM005



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Ref: STM007



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Ref: STM008



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Ref: STM009



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Ref: STM012

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Ref: STM014



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Briefings: *U.S.S. Voyager NCC-74656*, Kes, *U.S.S. Equinox NCC-72381*, Worlds of the Delta Quadrant

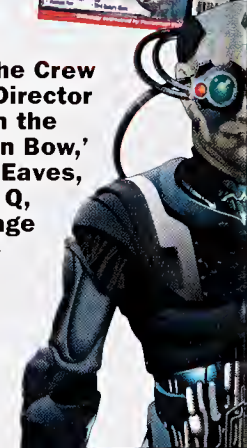
Interviews: Robert Picardo, Rick Berman, Michael Piller, and Jeri Taylor on Creating *STAR TREK: VOYAGER*, Brannon Braga
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Briefings: U.S.S. Enterprise Refit, K't'inga-Class Battle Cruiser, V'Ger

Interviews: Stephen Collins, Robert Wise

Features: The Director's Edition, Spock and Xon, Director's Edition VFX, Finishing The Movie, Persis Khambatta, Visual Effects: 1979, Robert McCall, Harold Livingston: Writing the first *STAR TREK* movie, The Memory Wall, Production Design, The Props

Ref: STM032 & Ref: STM32A

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Ref: STM034

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Briefings: Shuttlecraft, Data, Irina's Ship, 24th Century Aliens

Interviews: Jonathan Frakes, Maurice Hurley, Armin Shimerman, Majel Barrett, Robert Schenkkan

Features: DVD Box Sets, In the Beginning - *STAR TREK: THE NEXT GENERATION*'s birth, *STAR TREK*'s New World, The Making of 'Encounter at Farpoint,' Imagining the Future, Visual Effects, 24th Century Props

Ref: STM036 & Ref: STM36A

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Features: *STAR TREK* props - Borg arms, *STAR TREK: THE NEXT GENERATION*'s Second Season, Durinda Wood on Season Two's costumes, The Borg Attack, Production Design, Designing the Klingon Raptor, 'STAR TREK Bridge Commander' - Activision's new computer game, How to Build a Shuttle

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Briefings: U.S.S. Prometheus NX-59650, Geordi La Forge, Iden's Rebellion, Starship Operations

Interviews: Scott Bakula, Vaughn Armstrong, Brannon Braga, Robert Blackman

Features: Designing the Klingon Battle Cruiser, Obscure *STAR TREK* aliens, 'Starship Spotter,' 'Ships of the Line' Calendars, *STAR TREK* Science: Andre Bormanis on Enterprise NX-01's systems, Who is that Alien?, Hallmark Christmas Ornaments, A Versatile Set

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Briefings: Captain Proton, Tuvok, Freedom and Niagara Class, 24th Century Aliens

Interviews: Connor Trinneer, John Fleck, Phyllis Strong and Mike Sussman

Features: The Art of Tim Earls for *STAR TREK: VOYAGER*, Storyboards from *STAR TREK: FIRST CONTACT*, 'Canon' Books - the books that provide 'official' *STAR TREK* information, Will Richards' Artwork, Unobtainium Model - the original U.S.S. Enterprise NCC-1701 shooting model, On the Frontier

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Volume 3 Issue 1



Briefings: Ares IV, Miles O'Brien, The Lokirrim, Starfleet Equipment

Interviews: Dominic Keating, Matt Winston

Features: From the Wormhole - how alien surfaces were created, Syd Mead on designing V'Ger, *STAR TREK* props - Klingon food, Chief O'Brien's Rank is explained, Rick Sternbach on Intrepid Class Design Lineage, Image G, The Changing Face of Gul Dukat, ENTERPRISE Visual Effects, DC's *STAR TREK* Comics, Odo's True Form

Ref: STM037

Volume 3 Issue 3



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Interview: Anthony Montgomery

Features: A report on Grand Slam 2002, Designing the Ti'Mur with Doug Drexler, The Magnificent Ferengi, Hans Beimler on *STAR TREK: DEEP SPACE NINE*, Picard's Family Album, Jim Mees on his time working on *STAR TREK*, Durinda Wood's costumes for *STAR TREK: THE NEXT GENERATION*, *STAR TREK* Props, *STAR TREK: The Experience*

Ref: STM039

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Interviews: Kate Mulgrew, Marina Sirtis, Josh Clark

Features: *STAR TREK: VOYAGER*: Season Six Visual Effects

Ref: STM018



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Issue 23
The Borg**

Briefings: The Borg, U.S.S. Dauntless NX-01A, Federations Starships

Interviews: Rick Berman, Alice Krige, Manu Intraymi

Features: Creating the Borg, Borg Costumes, Assembling the Borg Queen, Borg Makeup

Ref: STM023



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The Original STAR TREK:**

Briefings: U.S.S. Grissom NCC-638, Dr. McCoy, Q's Anti-time Future, 23rd Century Aliens

Interviews: William Shatner, Nichelle Nichols, Hans Beimler

Features: Designing the Future, Women of *STAR TREK*

Ref: STM025



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Interviews: Robert Picardo, Rick Berman, Michael Piller and Jeri Taylor

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Issue 8
STAR TREK: THE MOTION PICTURE**

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Interviews: Stephen Collins, Robert Wise

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Issue 12
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Briefings: Shuttlecraft, Data, Irina's Ship, 24th Century Aliens

Interviews: Jonathan Frakes, Maurice Hurley, Armin Shimerman

Features: The Making of 'Encounter at Farpoint,' *STAR TREK*'s New World, DVD Box Sets

Ref: STM036



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Ref: STM037

STAR TREK Stories

Savik, Thal Arctos, Uti Sorbayo, and Diana O'Rourke

New Members of Kirk's Crew

Early drafts of *STAR TREK II* featured a Vulcan who kept changing sex, two beautiful young women who were attracted to older men, and a navigation officer who was part polar bear.

STAR TREK's creators had toyed with the idea of introducing new members of the *Enterprise*'s crew since work began on bringing the show back. In the first movie we had Decker and Ilia, and in the second we met the beautiful Vulcan lieutenant Saavik. What few people know is that while the script for *STAR TREK II* was in development different writers suggested a whole host of other characters, all of whom have been consigned to the footnotes of history.

There were some very good reasons to introduce new characters, not the least of which was that Spock died in this movie, so Kirk would need a new science officer. Accordingly, the character of Saavik appeared in every draft of the script, though the new Vulcan underwent some considerable changes. The writers didn't stop there, though; they consistently introduced new characters whose youth was a deliberate contrast with their more experienced superiors.

Young officers

The process began in Harve Bennett's first treatment, where he suggested that Kirk's son would join his father on the *Enterprise* and that together they would "boldly go where no one has gone before." When Jack B. Sowards expanded that outline into a full script he added several new Starfleet officers who were serving on the *Enterprise* under Captain Spock. Lieutenant Charles Waters had replaced Chekov as the ship's gunnery officer; a young male Vulcan called Savik (sic) had taken Spock's place at the science station; and a beautiful and efficient young woman called Diana O'Rourke was in Uhura's place at the communications panel. The script paid relatively little attention to Waters, but Savik and O'Rourke were both major characters.

Savik was clearly intended to replace Spock, who died in the first half of the film; he is



Saavik was the only one of several new characters proposed by the writers who actually appeared in the final version of *STAR TREK II: THE WRATH OF KHAN*.

described as having a "gleam in his eye that Spock hid" and had a definite sense of humor – he even made a couple of jokes at Kirk's expense. He also displayed a surprising knowledge of Terran religion, since at one point he started talking about sermons.

Diana O'Rourke was yet another beautiful young woman who was irresistibly drawn to Kirk. She spent her spare time reading up about him on the ship's library computer; after Spock died, she went straight to his quarters to comfort him; and at the end of the script she boldly approached him, told him that he needed a personal life, and that

she would like to be a part of it.

O'Rourke and Waters didn't make it into the next draft of the script, when Samuel A. Peeples transformed Savik into a Vulcan female (whom he initially called Ssavik before amending the spelling to the more familiar Saavik). Peeples did, however, introduce two new characters: Thal Arctos and Uti Sorbayo. His first outline offers a considerable amount of information about all three of these characters.

The biggest revelation was that, genetically at least, Ssavik was Spock's daughter. According to Peeples' notes, she was actually

STAR TREK Stories

half-Vulcan, half-Romulan. The outline never actually spells out her relationship with Spock, but it leaves little room for doubt that Ssavik's mother was actually the Romulan commander whom Spock encountered in 'The Enterprise Incident.'

Ssavik's Romulan mother

According to Peebles' notes, she "loved but once – and that a forbidden love, for she met a Vulcan of Federation Starfleet, who aroused within her breast a lasting devotion." In fact, her devotion was so lasting that, when she was granted the honor of motherhood (which the notes say was "a prized accolade on Romulus"), she decided to artificially inseminate herself with Spock's genetic material. The notes go on to say that for reasons known only to herself she sent her daughter to be educated by her 'father's' family.

It is clear that Peebles intended to make something of Ssavik's divided nature. The notes say, "With her there is a constant torment, an eternal struggle for dominance between the two sides of her nature. As a Romulan female, she is rated with an IQ of approximately 172 – and a fiery temperament that urges her to react passionately; as a Vulcan, that passion is held under rigid control. She uses logic, but unlike most Vulcans is not ruled by it. She has her tender side, and can respond to friendship, even love, with a depth as great as any Romulan woman."

Not surprisingly, the notes also say that,

although the true nature of Spock's relationship with Ssavik was not known, Kirk and McCoy would be able to make an educated guess.

Thal Arctos

The next character Peebles introduced was Thal Arctos, who was the *Enterprise's* new navigation officer. Genetically, he was half polar bear. The notes are keen to point out that this didn't mean he actually looked like a big, white bear. "Apart from his size, in appearance he is entirely human. His hair is snowy white, somewhat shaggy; and his huge hands are a bit more hairy than most. His fingernails, like many genetically changed species, are dark brown and not translucent."

In fact, to all intents and purposes, despite his polar bear DNA, he was entirely human. "He loves nothing better than to spout Elizabethan poetry (he even composes it) to an appreciative (or even terribly bored) audience. Since he stands 6'5", weighs something over 300 lbs – all solid rocklike muscle – is occasionally moody, even sullen, like his bear ancestors he is seldom refused a friendly request."

He was intended to provide a certain amount of comic relief. In one scene he stole a refrigeration unit from engineering so that he could have an ice bath, and he loved wild honey. Like Kirk, he was something of a womanizer, and his favorite pastime was whispering poetry into a female's ear.



In the earliest versions of the script, David was a Starfleet officer who joined his father aboard the U.S.S. ENTERPRISE NCC-1701 at the end of STAR TREK II.

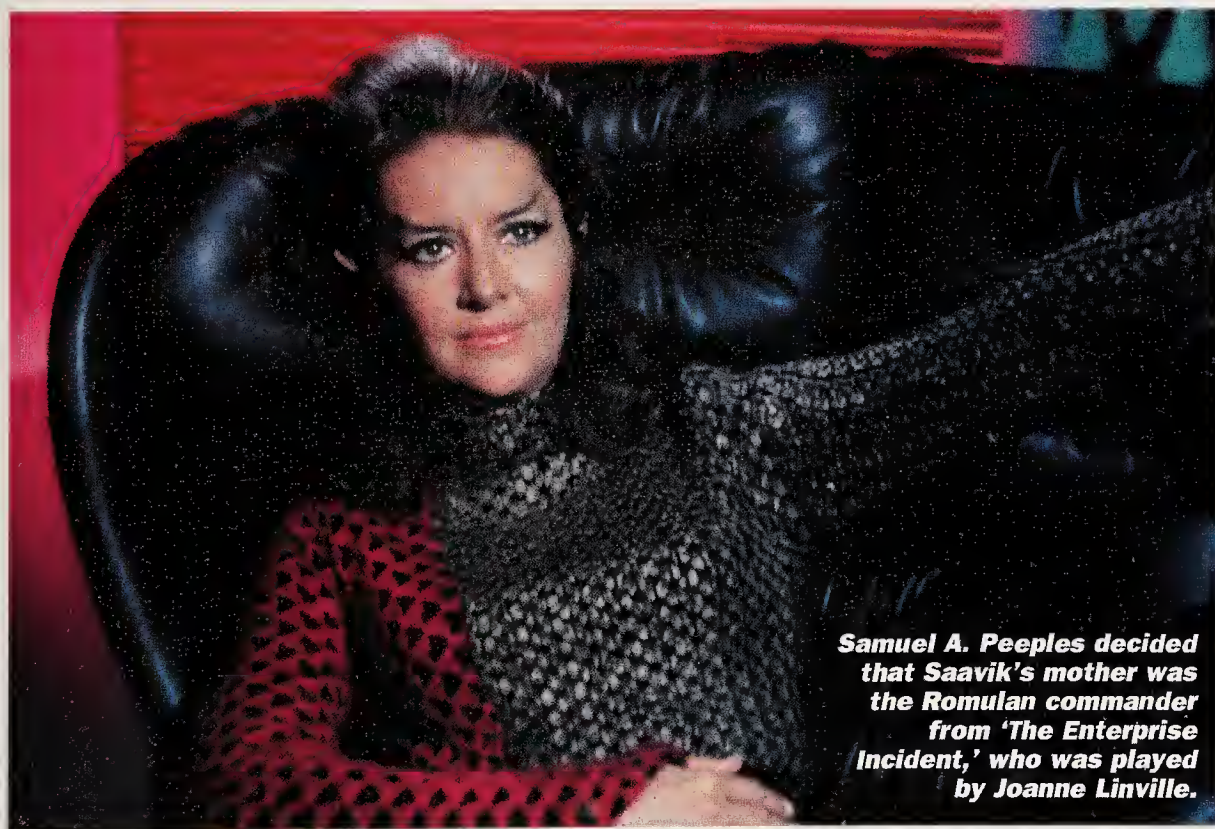
Uti Sabroyo

The last of Peebles' new characters was another beautiful young woman who had fallen for an older man. In this case, however, she hadn't fixated on Kirk but on Dr. McCoy. She was of East Indian descent, was olive-skinned, and had a "startling blue tattooed caste mark across her lovely forehead." It is not surprising that McCoy was flattered by her attentions, since she was described as being "beautiful, seductive, and fully aware of the feminine wiles most appealing to a man."

Intriguingly, she had clear religious beliefs, which is something that Starfleet officers normally lack. Specifically, she believed in the "Trimurti doctrine and holds the divinity of Brahma, Vishnu, and Silva."

Like McCoy, she was a doctor, but she had experimented with a variety of unorthodox techniques. In fact, Peebles' notes say that she was willing to risk her life in the pursuit of unusual treatments.

When Nicholas Meyer took his pass at the script he entirely eliminated Thal Arctos and Uti Sabroyo. He did retain the female version of Saavik, but made no references to her heritage. The movies after *STAR TREK II* introduced us to only one more crew member: the Vulcan Valeris. It would be left to the television series to populate the universe with new characters. ★



Samuel A. Peebles decided that Saavik's mother was the Romulan commander from 'The Enterprise Incident,' who was played by Joanne Linville.

— READERS' PAGES —



LETTERS



LETTERS



LETTERS



We'll be seeing the Romulans in *STAR TREK: NEMESIS*, but one reader would also like to see them in *ENTERPRISE*.

More Romulans

I JUST WANTED TO LET Rick Berman and those involved with *ENTERPRISE* know what a great job they're doing. The first season was great and I loved all the episodes, though some more than others. I also wanted to comment on the Romulan situation. Many people have written in to the magazine, asking about the Earth-Romulan War and whether or not we will see the Romulans in *ENTERPRISE*. I would just like to voice my opinion that it would be a big mistake not to include the Romulans and the Romulan War in the show.

In my opinion, the Romulans don't get enough air time, and I'm really excited about *STAR TREK: NEMESIS* later this year. I know it might seem like having another war in a *STAR TREK* series so soon after *DS9* ended isn't such a good idea, but I think the last two or three seasons of *DS9* were the best. Showing us the Earth-Romulan

War in the last seasons of *ENTERPRISE* would be just as good, if not better. I know many people want to see it.

David Nilsen,
Escondido, CA

Would other viewers like to see more of the Romulans and have *ENTERPRISE* involved in the Earth-Romulan War that occurred in the 22nd century? Write in and let us know.

Taking stock

NOW THAT *ENTERPRISE* HAS an entire season under its belt we can sit back and absorb what happened in the first year and speculate as to where this series is heading.

Did it ever occur to anyone writing in that the Vulcans we are currently seeing are acting more Romulan-like, as opposed to the traditional Vulcan ethics we have come to know? A lot can happen in 100 years. It is only logical to assume that the Vulcans will eventually see the error of their ways and adopt a more up-front stance.

As for the Andorians, I really hope to see more and more of them as the series progresses. They are, after all, a founding race of the Federation and, after an extremely successful relaunch, we can finally learn more about this intriguing race. I for one would not be opposed to having an Andorian aboard *ENTERPRISE*. The Andorians don't trust the Vulcans, and rightfully so. An Andorian crew member would go a long way to establishing not only trust but tolerance as well. It would also lead to a greater degree of cooperation and understanding and could

only inevitably result in the formation of the Federation. I hope that I am not the only one who feels this way, and that the producers of this fine television show take note.

Scott M Lubecki
Kenmore NY

What do other readers think? Are the Vulcans "acting more Romulan-like," and would others like to see an Andorian aboard *ENTERPRISE*?

Seven of Nine clone

IN RESPONSE TO THE letter entitled 'Worst Vulcan?' in Volume 3 Issue 3, I would like to say that, although I do not think of T'Pol as the worst Vulcan, I do agree that she does sound "unemotional and cold," as Aaron Tank said. From the beginning of the series, I have regarded T'Pol as a character who acts similarly to Seven of Nine, and I retain that position at the end of the first season. However, her point of view regarding humans is relatively Vulcan, no matter how she chooses to express her opinions. Her intonation is largely Seven of Nine, a fact that seems to be corroborated by her catsuit costumes. Nevertheless, it remains to be seen how truly Vulcan her mind is, as the series has only just begun. No one should be too quick to judge any character.

Amy Mayberry
via e-mail

Maybe it is inevitable that there will be some crossover between Vulcan characters and the Borg; they act in a similarly unemotional and

logical manner, but there are some people who think T'Pol is very much her own character ...

Independent woman

I THINK T'POL'S CHARACTER is right on point. She is a Vulcan who has been ordered to work with humans. It was established in the very first episode of *ENTERPRISE* that Vulcans don't believe humans are ready for interstellar travel, and T'Pol shares that belief. She is a strong-willed and very logical person and is an asset to Archer's crew. We must also realize that T'Pol is from a different time than Sarek, Spock, or Tuvok. Just as humans have evolved, so have Vulcans — we can't expect the beings of the 22nd century to be as enlightened as those in the 23rd and 24th centuries!

Eric James
via e-mail

Just as good

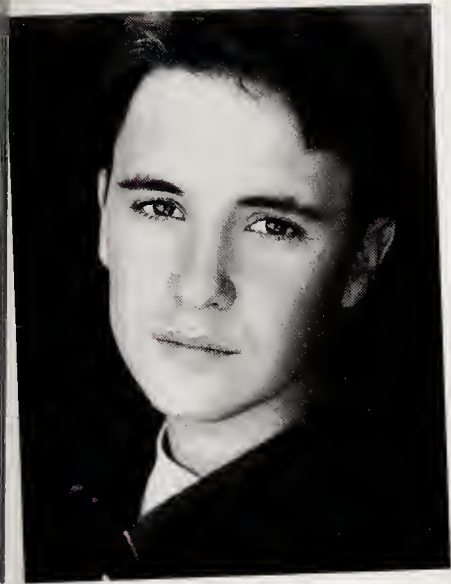
I COULDN'T DISAGREE more about T'Pol being the worst Vulcan. She has shown herself to be right up there with Spock and Tuvok. One must remember that she is an alien and will not have normal human reactions. (Jolene Blalock deserves a major commendation for her portrayal.) I mean, why do you think she had that piece of pecan pie in her quarters?

Ron Mosher
San Diego, CA

PLEASE NOTE WE CANNOT RETURN ANYTHING THAT YOU SEND US, AND YOUR LETTERS MAY BE EDITED FOR PUBLICATION.

COMING SOON

NEXT ISSUE ON SALE SEPTEMBER 3, 2002

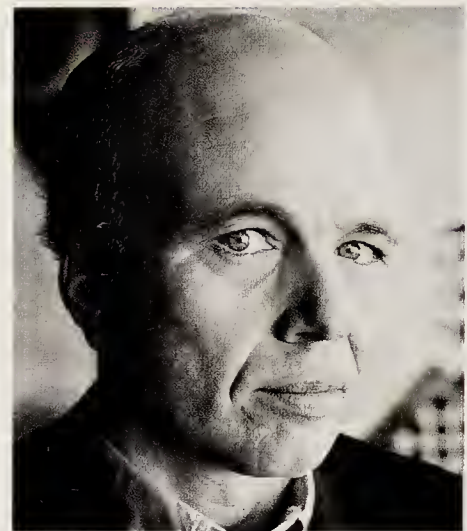


Wil Wheaton

We catch up with the former Wesley Crusher to talk about life on TNG, his current plans, and STAR TREK: NEMESIS.

TNG's Fourth Season

The fourth season of TNG is due for release on DVD, and we've got interviews with a selection of the year's writers, producers, actors, guest stars, and behind-the-scenes supremos.



Clint Howard

The former child star of 'The Corbomite Maneuver' talks to us about his busy career, which has included guest spots on STAR TREK: DEEP SPACE NINE and, more recently, ENTERPRISE.

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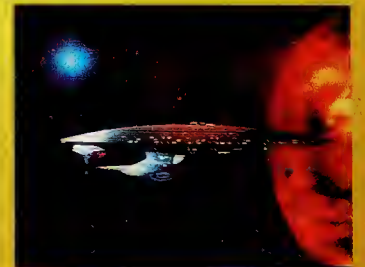
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Kai Winn



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